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(21) International Application Number: PCT/US98/06955 (22) International Filing Date: 10 April 1998 (10.04.98) (30) Priority Data: 08/838,821 10 April 1997 (10.04.97) US (71) Applicant: GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). (72) Inventors: JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). (74) Agent: SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).			(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs)			
(57) Abstract Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.			

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SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

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Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

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Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect.

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Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

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Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted

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proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

5 The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

 In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

15 In other embodiments, the present invention provides an isolated polynucleotide
 consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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 30 or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide
 comprising a nucleotide sequence which hybridizes to a sequence selected from the group
 consisting of:

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NO:1449, SEQ ID NO:1450, SEQ ID NO:1451, SEQ ID NO:1452, SEQ ID
NO:1453, SEQ ID NO:1454, SEQ ID NO:1455, SEQ ID NO:1456, SEQ ID
NO:1457, SEQ ID NO:1458, SEQ ID NO:1459, SEQ ID NO:1460, SEQ ID
30 NO:1461, SEQ ID NO:1462, SEQ ID NO:1463, SEQ ID NO:1464, SEQ ID
NO:1465, SEQ ID NO:1466, SEQ ID NO:1467, SEQ ID NO:1468, SEQ ID
NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID
NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID
NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID

NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID
 NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID
 NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID
 NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID
 5 NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;
 or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described
 polynucleotides.

10 DETAILED DESCRIPTION

The nucleotide sequences of the sESTs of the present invention are reported in the
 Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each
 SEQ ID NO: in the Sequence Listing.

15 Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.)
 followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

1	BV31	18	CB302	35	BZ83	52	CD244
2	BV34	19	CB318	36	BZ87	53	CD265
20 3	BV37	20	CB321	37	CB15	54	BT217
4	BV45	21	CB96	38	CB2	55	BV278
5	BV8	22	CB98	39	CB44	56	BV280
6	BV93	23	BZ42	40	CC11	57	BV282
7	BV99	24	BZ53	41	CC182	58	BV285
25 8	CB100	25	BZ56	42	CC298	59	BV286
9	CB107	26	BZ6	43	CC310	60	BV291
10	CB110	27	BZ607	44	CC323	61	BV295
11	CB114	28	BZ61	45	CC332	62	BW389
12	CB118	29	BZ62	46	CC335	63	BX135
30 13	CB123	30	BZ641	47	CC338	64	BX141
14	CB129	31	BZ644	48	CC41	65	BX148
15	CB137	32	BZ72	49	CC52	66	BZ1
16	CB239	33	BZ74	50	CD107	67	BZ16
17	CB259	34	BZ82	51	CD205	68	BZ187

	69	BZ19	103	CE159	137	CH315	171	CC194
	70	BZ205	104	CE2	138	CH325	172	CC198
	71	BZ222	105	CE347	139	BZ568	173	CC199
	72	BZ230	106	CE36	140	BZ578	174	CC205
5	73	BZ234	107	CE40	141	BZ588	175	CC215
	74	BZ244	108	CE87	142	BZ597	176	CC253
	75	BZ269	109	CG1	143	BZ598	177	CC258
	76	BZ280	110	CG44	144	CH637	178	CC259
	77	BZ288	111	CG60	145	CH644	179	CC265
10	78	BZ304	112	CG68	146	CH699	180	CC288
	79	BZ328	113	BP202	147	CI240	181	CC95
	80	BZ331	114	BP242	148	CI247	182	CC96
	81	BP646	115	BP243	149	CJ1	183	CD311
	82	BP652	116	BZ444	150	CJ19	184	CD323
15	83	BP656	117	BZ453	151	CJ24	185	CH338
	84	BP666	118	CC233	152	CJ27	186	CH355
	85	BP667	119	CC242	153	CJ3	187	CH377
	86	BP674	120	CC247	154	CJ37	188	CH421
	87	BP695	121	CC344	155	CJ42	189	CH425
20	88	BP705	122	CC346	156	CJ44	190	CH522
	89	BP713	123	CC351	157	CJ49	191	CH541
	90	BP720	124	CC359	158	CJ50	192	CH555
	91	BP750	125	CC364	159	CJ55	193	CH558
	92	BP754	126	CC365	160	CJ6	194	CH582
25	93	BW143	127	CC374	161	CJ76	195	CH595
	94	BR307	128	CE303	162	CJ77	196	CH720
	95	BR309	129	CE328	163	CJ84	197	CH723
	96	BR312	130	CG199	164	CJ86	198	CH724
	97	BR318	131	CG209	165	CJ91	199	CH735
30	98	CB187	132	CG210	166	CC111	200	CH742
	99	CB190	133	CG350	167	CC118	201	CI126
	100	CB204	134	CG354	168	CC120	202	CI129
	101	CB213	135	CG426	169	CC126	203	CI133
	102	CE120	136	CH303	170	CC130	204	CI181

	205	CI229	239	CG160	273	CI395	307	CJ397
	206	CI25	240	CG175	274	CI407	308	CJ400
	207	CI52	241	CG176	275	CI411	309	CJ404
	208	CI84	242	CG180	276	CI437	310	CJ415
5	209	CI91	243	CG279	277	CI443	311	CJ420
	210	BP163	244	CG292	278	CI444	312	CJ424
	211	BP175	245	CG300	279	CI459	313	CJ434
	212	BP199	246	CG301	280	CI480	314	CJ454
	213	BP272	247	CG314	281	CI490	315	CJ457
10	214	BP284	248	CG315	282	CI492	316	CJ481
	215	BP294	249	CG324	283	CI493	317	CJ493
	216	BP299	250	CG336	284	CI510	318	CJ501
	217	BP300	251	CG99	285	CI522	319	CJ514
	218	BP306	252	CH143	286	CI534	320	CJ539
15	219	BP311	253	CH207	287	CI542	321	CJ540
	220	BP312	254	CH224	288	CI560	322	CJ549
	221	BP327	255	CH227	289	CI561	323	CJ551
	222	BP345	256	CH245	290	CI583	324	CK126
	223	BP368	257	CH246	291	CI586	325	CK151
20	224	BP467	258	CH27	292	CJ145	326	CK181
	225	BP468	259	CH30	293	CJ149	327	CK201
	226	BR375	260	CH4	294	CJ160	328	CK213
	227	BR390	261	CH64	295	CJ164	329	CK218
	228	BR408	262	CH78	296	CJ168	330	CK234
25	229	BR418	263	CH85	297	CJ176	331	CK37
	230	BY66	264	CH87	298	CJ183	332	CK48
	231	CF118	265	CN320	299	CJ194	333	CL104
	232	CF127	266	CN343	300	CJ206	334	CL110
	233	CF22	267	CN344	301	CJ230	335	CL122
30	234	CF235	268	CN395	302	CJ237	336	CL132
	235	CG109	269	CN423	303	CJ257	337	CL147
	236	CG131	270	CI363	304	CJ265	338	CL152
	237	CG153	271	CI386	305	CJ378	339	CL181
	238	CG158	272	CI392	306	CJ389	340	CL182

	341	CL399	375	CN516	409	CO58	443	CO155
	342	CL469	376	CN532	410	CO48	444	CO153
	343	CL470	377	CN552	411	CO444	445	CO145
	344	CL481	378	CN593	412	CO431	446	CO140
5	345	CL493	379	CN619	413	CO391	447	CO139
	346	CM12	380	CN621	414	CO384	448	CO128
	347	CM178	381	CN667	415	CO36	449	CO1254
	348	CM188	382	CN703	416	CO351	450	CO1247
	349	CM194	383	CN718	417	CO337	451	CO1232
10	350	CM246	384	CN729	418	CO327	452	CO1224
	351	CM251	385	CN835	419	CO315	453	CO1223
	352	CM54	386	CN896	420	CO304	454	CO1206
	353	CM62	387	CO933	421	CO270	455	CO1198
	354	CN140	388	CO924	422	CO268	456	CO1196
15	355	CN171	389	CO908	423	CO264	457	CO1194
	356	CN173	390	CO900	424	CO261	458	CO1187
	357	CN238	391	CO889	425	CO257	459	CO1180
	358	CN29	392	CO888	426	CO253	460	CO1178
	359	CN291	393	CO874	427	CO25	461	CO1175
20	360	CN304	394	CO851	428	CO246	462	CO117
	361	CN327	395	CO83	429	CO244	463	CO1168
	362	CN49	396	CO821	430	CO240	464	CO1164
	363	CN50	397	CO806	431	CO228	465	CO1162
	364	CN54	398	CO798	432	CO223	466	CO1161
25	365	CN65	399	CO79	433	CO222	467	CO1159
	366	CJ305	400	CO71	434	CO209	468	CO1153
	367	CJ316	401	CO7	435	CO205	469	CO1151
	368	CJ317	402	CO69	436	CO204	470	CO1137
	369	CJ336	403	CO66	437	CO20	471	CO1123
30	370	CJ347	404	CO639	438	CO197	472	CO1076
	371	CJ360	405	CO638	439	CO185	473	CO1072
	372	CJ365	406	CO625	440	CO170	474	CO1026
	373	CJ366	407	CO62	441	CO17	475	CO1000
	374	CN483	408	CO602	442	CO163	476	CN755

	477	CN736	511	CR1166	545	CR632	579	CO409
	478	CN709	512	CR1186	546	CR641	580	CO474
	479	CO975	513	CR1190	547	CT729	581	CO480
	480	CO990	514	CR329	548	CN922	582	CO500
5	481	CP280	515	CR354	549	CN934	583	CO519
	482	CP283	516	CR377	550	CN951	584	CO522
	483	CP287	517	CR390	551	CN952	585	CO526
	484	CP289	518	CR392	552	CN980	586	CO559
	485	CP294	519	CR422	553	CP111	587	CO595
10	486	CP304	520	CR423	554	CP147	588	CO605
	487	CP307	521	CR466	555	CU13	589	CO618
	488	CP311	522	CR477	556	CP251	590	CO629
	489	CP313	523	CR478	557	CP258	591	CO643
	490	CP314	524	CR482	558	CP33	592	CO653
15	491	CP328	525	CR491	559	CP41	593	CO661
	492	CP352	526	CR494	560	CP91	594	CO667
	493	CQ286	527	CR502	561	CP92	595	CO695
	494	CQ294	528	CR506	562	CQ160	596	CO696
	495	CQ304	529	CR513	563	CQ165	597	CO707
20	496	CQ309	530	CR514	564	CQ268	598	CO716
	497	CQ331	531	CR515	565	CQ30	599	CO718
	498	CQ333	532	CR527	566	CR100	600	CO720
	499	CR1116	533	CR529	567	CR178	601	CO722
	500	CR1118	534	CR537	568	CR184	602	CO736
25	501	CR1121	535	CR538	569	CR263	603	CO763
	502	CR1127	536	CR540	570	CR335	604	CO767
	503	CR1135	537	CR541	571	CR4	605	CP116
	504	CR1141	538	CR545	572	CR61	606	CP151
	505	CR1142	539	CR587	573	CR93	607	CI293
30	506	CR1144	540	CR588	574	CO282	608	CI294
	507	CR1147	541	CR593	575	CO310	609	CI298
	508	CR1155	542	CR594	576	CO334	610	CU14
	509	CR1156	543	CR611	577	CO387	611	CU2
	510	CR1162	544	CR618	578	CO390	612	CU25

	613	CU32	647	CR678	681	CT748	715	CS520
	614	CU39	648	CR726	682	CT738	716	CS524
	615	CU40	649	CR733	683	CT726	717	CS534
	616	DA10	650	CR778	684	CT706	718	CT14
5	617	DA136	651	CR836	685	CT705	719	CT142
	618	DA155	652	CR839	686	CT702	720	CT143
	619	DA16	653	CR872	687	CT693	721	CT149
	620	DA165	654	CR890	688	CT677	722	CT156
	621	DA170	655	CR916	689	CT658	723	CT159
10	622	DA183	656	CR929	690	CT645	724	CT162
	623	DA223	657	CR930	691	CT636	725	CT188
	624	DA224	658	CR936	692	CT631	726	CT189
	625	DA225	659	CR974	693	CT616	727	CT190
	626	DA227	660	CT747	694	CT611	728	CT193
15	627	DA228	661	CT727	695	CT600	729	CT194
	628	DA234	662	CT690	696	CT585	730	CT2
	629	DA244	663	CT649	697	CT583	731	CT207
	630	DA246	664	CT624	698	CS224	732	CT220
	631	DA274	665	CT564	699	CS255	733	CT223
20	632	DA471	666	CT88	700	CS267	734	CT226
	633	DA490	667	CT864	701	CS271	735	CT227
	634	DA495	668	CT857	702	CS278	736	CT24
	635	DA496	669	CT852	703	CS284	737	CT254
	636	DA504	670	CT838	704	CS296	738	CT256
25	637	DA505	671	CT808	705	CS297	739	CT258
	638	DA507	672	CT807	706	CS317	740	CT271
	639	DA516	673	CT797	707	CS319	741	CT275
	640	DA529	674	CT791	708	CS322	742	CT28
	641	DA84	675	CT785	709	CS353	743	CT284
30	642	CR1003	676	CT783	710	CS366	744	CT293
	643	CR1013	677	CT780	711	CS471	745	CO1020
	644	CR1044	678	CT771	712	CS475	746	CO1043
	645	CR1056	679	CT754	713	CS485	747	CO1067
	646	CR1063	680	CT750	714	CS516	748	CO1069

	749	CO1080	783	DB257	817	CW1617	851	CT384
	750	CO1081	784	DB343	818	CW1632	852	CT392
	751	CO1094	785	DB415	819	CW1636	853	CT394
	752	CO956	786	DB53	820	CW1640	854	CT415
5	753	CO973	787	DB85	821	CW169	855	CT421
	754	CJ471	788	CW1000	822	CW172	856	CT423
	755	CJ472	789	CW1038	823	CW173	857	CT434
	756	CJ475	790	CW1087	824	CW175	858	CT440
	757	CJ483	791	CW1100	825	CV123	859	CT443
10	758	CJ484	792	CW1109	826	CV156	860	CT450
	759	CJ485	793	CW1112	827	CV160	861	CT453
	760	CJ486	794	CW115	828	CV192	862	CT457
	761	CJ488	795	CW1150	829	CV203	863	CT466
	762	CJ496	796	CW1155	830	CV215	864	CT474
15	763	CJ497	797	CW1177	831	CV227	865	CT475
	764	CJ498	798	CW1195	832	CV263	866	CT479
	765	CJ507	799	CW1200	833	CV275	867	CT489
	766	CJ508	800	CW1201	834	CV305	868	CT51
	767	CJ519	801	CW1214	835	CV328	869	CT519
20	768	CJ520	802	CW1225	836	CV380	870	CT521
	769	CJ521	803	CW1230	837	CV394	871	CT526
	770	CJ522	804	CW1233	838	CV410	872	CT536
	771	CJ534	805	CW1272	839	CV416	873	CT541
	772	CJ536	806	CW1292	840	CV461	874	CT547
25	773	CJ543	807	CW1306	841	CV493	875	CT550
	774	CJ544	808	CW1311	842	CV501	876	CT559
	775	CJ547	809	CW1314	843	CT3	877	CT562
	776	CK53	810	CW1334	844	CT314	878	DE36
	777	CK7	811	CW1365	845	CT317	879	DE37
30	778	CK70	812	CW1372	846	CT320	880	DE4
	779	CL49	813	CW149	847	CT326	881	DE42
	780	CL63	814	CW152	848	CT340	882	DE63
	781	DB203	815	CW1574	849	CT353	883	DE70
	782	DB208	816	CW1611	850	CT358	884	DE83

	885	DE103	919	CS771	953	CW775	987	DA337
	886	DE105	920	CS773	954	CW795	988	DA348
	887	DE110	921	CS776	955	CW802	989	DA373
	888	DE114	922	CW222	956	CW823	990	DA388
5	889	DE117	923	CW224	957	CW835	991	DA389
	890	DE119	924	CW226	958	CZ115	992	DA390
	891	DE91	925	CW232	959	CZ122	993	DA391
	892	DE95	926	CW254	960	CZ186	994	DA414
	893	DE96	927	CW272	961	CZ214	995	DA428
10	894	CW420	928	CW280	962	CZ247	996	DA443
	895	CW424	929	CW313	963	CZ251	997	DA451
	896	CW457	930	CW314	964	CZ268	998	CW1458
	897	CW485	931	CW347	965	CZ270	999	CW1475
	898	CS383	932	CW354	966	CZ278	1000	CW1481
15	899	CS384	933	CW363	967	CZ291	1001	CW1506
	900	CS399	934	CW374	968	CZ320	1002	CW1510
	901	CS405	935	CW382	969	CZ326	1003	CW1543
	902	CS409	936	CW383	970	CZ362	1004	CW1550
	903	CS431	937	CW386	971	CW1414	1005	CW1552
20	904	CS438	938	CW388	972	CW1440	1006	CZ372
	905	CS454	939	CW512	973	CE209	1007	CZ374
	906	CS588	940	CW517	974	CE216	1008	CW902
	907	CS629	941	CW53	975	CE232	1009	CW922
	908	CS636	942	CW554	976	CE242	1010	CW924
25	909	CS637	943	CW585	977	CF193	1011	CW976
	910	CS638	944	CW618	978	CH776	1012	CW979
	911	CS645	945	CE197	979	CW1381	1013	CW984
	912	CS679	946	CW662	980	CW1389	1014	CW998
	913	CS682	947	CW675	981	CW1399	1015	CZ1
30	914	CS734	948	CW691	982	CZ653	1016	CW753
	915	CS743	949	CW707	983	CZ681	1017	CW759
	916	CS752	950	CW735	984	CZ711	1018	CW800
	917	CS756	951	CW762	985	CZ719	1019	CW891
	918	CS765	952	CW768	986	DA306	1020	CW960

	1021	CT80	1055	DC14	1089	DH1206	1123	DF478
	1022	DF1115	1056	CW1670	1090	DH1212	1124	DF483
	1023	DF1117	1057	CW1682	1091	DH1213	1125	DF494
	1024	DF1125	1058	DF814	1092	DH190	1126	DF499
5	1025	DF134	1059	DF821	1093	DI191	1127	DF7
	1026	DF14	1060	DF842	1094	DI207	1128	DF706
	1027	DF163	1061	DG1	1095	DI216	1129	DF713
	1028	DF174	1062	DG17	1096	DI243	1130	DF727
	1029	DF175	1063	DG174	1097	DI248	1131	DF737
10	1030	DF180	1064	DG256	1098	DI261	1132	DF756
	1031	DF185	1065	DG26	1099	DF1005	1133	DF757
	1032	DF201	1066	DG266	1100	DF1009	1134	DF762
	1033	DF202	1067	DG326	1101	DF1010	1135	DF776
	1034	DF203	1068	DG327	1102	DF102	1136	DF777
15	1035	DF206	1069	DG329	1103	DF1050	1137	DF780
	1036	DF219	1070	DG330	1104	DF1062	1138	DF783
	1037	DF230	1071	DG331	1105	DF1063	1139	DG12
	1038	DF232	1072	DG44	1106	DF1084	1140	DG121
	1039	DF239	1073	DG65	1107	DF153	1141	DG128
20	1040	DF244	1074	DG69	1108	DF218	1142	DG141
	1041	DF259	1075	DG7	1109	DF251	1143	DG149
	1042	DF266	1076	DG71	1110	DF280	1144	DH28
	1043	DF46	1077	DG76	1111	DF286	1145	DH303
	1044	DF65	1078	DG82	1112	DF316	1146	DH318
25	1045	DF69	1079	DH1086	1113	DF317	1147	DH322
	1046	DB145	1080	DH1098	1114	DF343	1148	DH340
	1047	DB150	1081	DH1135	1115	DF347	1149	DH371
	1048	DB159	1082	DH1145	1116	DF370	1150	DH40
	1049	DB174	1083	DH1153	1117	DF382	1151	DH401
30	1050	DB180	1084	DH1182	1118	DF396	1152	DH432
	1051	CY1	1085	DH1185	1119	DF428	1153	DH451
	1052	CY11	1086	DH1190	1120	DF453	1154	DH496
	1053	CY3	1087	DH1191	1121	DF457	1155	DH502
	1054	CY9	1088	DH1201	1122	DF460	1156	DH529

	1157	DH66	1191	DF915	1225	DH1357	1259	DI501
	1158	DF518	1192	DF948	1226	DH145	1260	DI504
	1159	DF521	1193	DF950	1227	DH999	1261	DK111
	1160	DF538	1194	DF956	1228	DI160	1262	DK113
5	1161	DF543	1195	DF966	1229	DI386	1263	DK120
	1162	DF545	1196	DF968	1230	DI391	1264	DK122
	1163	DF547	1197	DF971	1231	DI435	1265	DK126
	1164	DF568	1198	DF973	1232	DI448	1266	DK134
	1165	DF587	1199	DF979	1233	DI454	1267	DK136
10	1166	DF589	1200	DF984	1234	DJ109	1268	DK150
	1167	DF591	1201	DF989	1235	DJ146	1269	DK160
	1168	DF601	1202	DH1257	1236	DJ167	1270	DK170
	1169	DF606	1203	DH1308	1237	DF1065	1271	DK182
	1170	DF62	1204	DH1314	1238	DI387	1272	DK185
15	1171	DF620	1205	DI341	1239	DI393	1273	DK197
	1172	DF625	1206	DH1265	1240	DI403	1274	DK206
	1173	DF648	1207	DI349	1241	DI430	1275	DK219
	1174	DF657	1208	DI355	1242	DI438	1276	DK223
	1175	DF659	1209	DI362	1243	DJ2	1277	DK227
20	1176	DF661	1210	DI366	1244	DJ188	1278	DK229
	1177	DF662	1211	DI508	1245	DJ238	1279	DK230
	1178	DF670	1212	DI516	1246	DJ259	1280	DK243
	1179	DF674	1213	DI518	1247	DK64	1281	DK264
	1180	DF682	1214	DF1066	1248	DK70	1282	DK268
25	1181	DF688	1215	DF1069	1249	DK81	1283	DK31
	1182	DF810	1216	DG279	1250	DK84	1284	DK39
	1183	DF823	1217	DH1010	1251	DI462	1285	DK93
	1184	DF835	1218	DH1013	1252	DI466	1286	DL101
	1185	DF860	1219	DH1044	1253	DI474	1287	DL110
30	1186	DF877	1220	DH1045	1254	DI475	1288	DL116
	1187	DF883	1221	DH1073	1255	DI479	1289	DL132
	1188	DF895	1222	DH1078	1256	DI480	1290	DL63
	1189	DF909	1223	DH1340	1257	DI482	1291	DL82
	1190	DF910	1224	DH1349	1258	DI500	1292	DL95

	1293	DL99	1327	DL491	1361	DL547	1395	DO181
	1294	DJ332	1328	DL495	1362	DL550	1396	DO419
	1295	DJ362	1329	DL498	1363	DL551	1397	DO424
	1296	DK290	1330	DL504	1364	DL601	1398	DO440
5	1297	DK321	1331	DM118	1365	DL604	1399	DO447
	1298	DK324	1332	DM122	1366	DL605	1400	DO568
	1299	DK329	1333	DM126	1367	DL607	1401	DO575
	1300	DK357	1334	DM128	1368	DL608	1402	DO589
	1301	DK360	1335	DM130	1369	DL616	1403	DO610
10	1302	DL141	1336	DM147	1370	DL619	1404	DO715
	1303	DL146	1337	DM169	1371	DL620	1405	DO722
	1304	DL162	1338	DM26	1372	DL634	1406	DO737
	1305	DL163	1339	DM404	1373	DM194	1407	DO742
	1306	DL169	1340	DM406	1374	DM197	1408	DO755
15	1307	DL181	1341	DM407	1375	DM221	1409	DO765
	1308	DL185	1342	DM420	1376	DM248	1410	DO797
	1309	DL218	1343	DM425	1377	DM250	1411	DO836
	1310	DL220	1344	DM435	1378	DM262	1412	DO884
	1311	DL248	1345	DM445	1379	DM265	1413	DO896
20	1312	DL289	1346	DM449	1380	DM272	1414	CZ549
	1313	DL290	1347	DM459	1381	DM278	1415	CZ598
	1314	DL291	1348	DM462	1382	DM293	1416	DT431
	1315	DL316	1349	DM469	1383	DM303	1417	DT443
	1316	DL320	1350	DM482	1384	DM340	1418	DT446
25	1317	DL321	1351	DM6	1385	DM360	1419	DT449
	1318	DL425	1352	DM94	1386	DM365	1420	DT450
	1319	DL426	1353	DJ279	1387	DM522	1421	DT455
	1320	DL427	1354	DJ284	1388	DM533	1422	DT458
	1321	DL439	1355	DJ299	1389	DM542	1423	DN106
30	1322	DL440	1356	DJ319	1390	DM87	1424	DN153
	1323	DL444	1357	DJ323	1391	DN124	1425	DN176
	1324	DL457	1358	DL531	1392	DN144	1426	DT530
	1325	DL463	1359	DL535	1393	DN147	1427	DT534
	1326	DL466	1360	DL543	1394	DN167	1428	DT535

	1429	DT544	1463	DW1	1497	BK5
	1430	DT563	1464	DW389	1498	BK504
	1431	DT584	1465	DW398	1499	BK513
	1432	DT590	1466	DW654	1500	BK517
5	1433	DT596	1467	DW659		
	1434	DT597	1468	DW665		
	1435	DT598	1469	DW694		
	1436	DT640	1470	DW705		
	1437	DT655	1471	DW716		
10	1438	DT674	1472	DW749		
	1439	DT719	1473	DW761		
	1440	DT734	1474	DW765		
	1441	DT779	1475	DW771		
	1442	DT801	1476	DW78		
15	1443	DT802	1477	DW780		
	1444	DN696	1478	BK10		
	1445	DN697	1479	BK11		
	1446	DN704	1480	BK2		
	1447	DN710	1481	BK368		
20	1448	DN711	1482	BK373		
	1449	DN714	1483	BK374		
	1450	DN721	1484	BK375		
	1451	DN722	1485	BK384		
	1452	DN732	1486	BK402		
25	1453	DN740	1487	BK410		
	1454	DN746	1488	BK415		
	1455	DN747	1489	BK425		
	1456	DN753	1490	BK427		
	1457	DN756	1491	BK436		
30	1458	DN764	1492	BK445		
	1459	DN770	1493	BK455		
	1460	DN772	1494	BK458		
	1461	DN1120	1495	BK494		
	1462	DU372	1496	BK498		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) ²	Hybridization Temperature and Buffer ¹	Wash Temperature and Buffer ¹
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T _D *; 1xSSC	T _D *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T _H *; 4xSSC	T _H *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T _J *; 4xSSC	T _J *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T _L *; 2xSSC	T _L *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T _R *; 4xSSC	T _R *; 4xSSC

[‡]: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

[†]: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

*T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. ~~The isolated~~

polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* **19**, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* **185**, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from *in vitro* culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art, as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligands. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

10 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

20 Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon γ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

30 Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.
- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this matter prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection
5 or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci
10 USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating
15 autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B
20 lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of
25 well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

30 Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-
pulsed APCs either expressing a peptide of the present invention or together with a
stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro*
activated T cells into the patient. Another method of enhancing anti-viral immune responses
10 would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding
a protein of the present invention as described herein such that the cells express all or a
portion of the protein on their surface, and reintroduce the transfected cells into the patient.
The infected cells would now be capable of delivering a costimulatory signal to, and thereby
activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor
cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma)
transfected with a nucleic acid encoding at least one peptide of the present invention can be
administered to a subject to overcome tumor-specific tolerance in the subject. If desired,
the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing
the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide
having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned
to the patient to result in expression of the peptides on the surface of the transfected cell.
Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B
lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation
signal to T cells to induce a T cell mediated immune response against the transfected tumor
cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can
be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain
truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an
MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC
class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected
5 with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured
10 by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-
15 3.19; Chapter 7, *Immunologic studies in Humans*); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa
20 et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnoli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching
25 (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

30 Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet
5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post
10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15 Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al.,
20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic*
25 *Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994;
30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10 A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

20 A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

25 Another category of tissue regeneration activity that may be attributable to the protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,
20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

 A protein or peptide has chemotactic activity for a particular cell population if it can
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

 Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et
30 al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Grüber et al. J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

Tumor Inhibition Activity

20 In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

30

Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF α , TNF β , TNF γ , G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or complement its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides,
10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient,
20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

 In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a
25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either
30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous
5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

20 When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical
25 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,
30 antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem.Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1 or 2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1 or 2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1 or 2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1or2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	PeripheralBloodMononuclearCell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	SalivaryGland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	PeripheralBloodMononuclearCell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: Jacobs, Kenneth
McCoy, John
LaVallie, Edward
Racie, Lisa
Merberg, David
Treacy, Maurice
Spaulding, Vikki
Agostino, Michael
- (ii) TITLE OF INVENTION: SECRETED, EXPRESSED SEQUENCE TAGS
- (iii) NUMBER OF SEQUENCES: 1500
- (iv) CORRESPONDENCE ADDRESS
 - (A) ADDRESSE: Genetics Institute, Inc.
 - (B) STREET: 87 CambridgePark Drive
 - (C) CITY: Cambridge
 - (D) STATE: Massachusetts
 - (E) COUNTRY: U.S.A
 - (F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy Disk
 - (B) COMPUTER: IBM PC Compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
 - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Brown, Scott A.
 - (B) REGISTRATION NUMBER: 32,724
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (617) 498-8224
 - (B) TELEFAX: (617) 876-5851

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

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GAATTCGGCC TTCATGGCCT AAGTGTTTAA ATTATAAGCT GGTGAAGTGA AATAACACAA      60
ATCAAGCTCA CCAATTTTAA TACTCAGCTG TTGATAAACA AACTGAAGA GTGACATTTA      120
AATTGGAATT ATCTTCTTTG AAGTAGCATT GCAGCACTTT TGAATGACTT CCAAAAGGCT      180
GATCATAAAA ATCACTTCAA TCATTTTCAA ATTTTACTTT AGCAGCAATG AAGTTATTTG      240

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GTATGACTCA GATGAACCTT CTGCTCTGTC TTGGAGTTAT TATGGTCATT TCATTTTCTG 300
CAACCTGGGA AACCTCGAG 320

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTCGGCC TTCATGGCCT ACGAGTGGAT CTGGTTGAGA GGAAAGCAGC TAAAAATACA 60
GGAGATGAAA GGGATCATAA CGAACATAAT GAACCATGTT CATTATGGTT CGTGGGGAGG 120
CAGGAAAGCA CAGTATCCAG GGCATAGGCA GAAGAGCTGT CTTTCACGGG AGGAGGGGAA 180
CATATTCTAC TGCAATAAGC AAGGGCGGGG TAAGTACGGA TCGGGTACTT TGGGAACTAT 240
GACGGTAGGG AGTTCAGGAA GTTGCTGCCT GAAGGCATAA AGGTTTTTTT TTTTTTTTTT 300
TTTTTTTGCC AATTGGTCCA GTACCCTCCT TCTGTGGCCC CCATCTCCAG TCTCGAG 357

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GAATTCCTTTA TATAATTTGG ATACCTACTC ATTGTCAGTT GTATGCTTTG CAAATATCTT 60
TCCTGACCCT TACTTACCTT TTCACTCTTA ATGGTATCTT TGATGAATCA AAAATTTTTC 120
TTTTTTTGTT GTTTTTTGAG ACAGAGTCTT AACTCTGTCA CCCAGGCTGG AGTGCAGTGC 180
ATGAACATGG CTCACTGCAG CCTCAACTTC TTGGACTCAA GCAATCCTCC TGCCTCAGAA 240
CCTCTCGAG 249

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CTAGCTCCTT TCCTTCTACT CTCCTGCTCA 60
GACCATTAGT AGGTACTTTG TTAATAAAAA AACTAGATTA ACATCAATAT TACTCCAATT 120
TGGTATCTTT TACACTATGT ATTATACCTA CTTTCTTTT ATTTCAATTA CAAATAGTTT 180
AAATTACTTT ATCAACCAGC TGTATTGTTT CCCTCTTGTA AAAGTACCAT CAAGTGGGGA 240
AAATGTATGT GGCAGTCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GAATTCGGCC TTCATGGCCT AATAACTTAC CCAGTCACGA ATATTCTTC ATAGCAGCAT	60
CAGAGTGGAC TAATACGATT ATAATTATCA TCACCTTTTG ACTGACCAAT TGATTACAG	120
TATTGAGTTC AATCTGTTT TTTAAAAAAT ATCTTCTAAA TATCAGGTGC TGTATTAGAT	180
GTGGGGTACA AAAATGTATT TTCATTACT CACTAATTTA CTTAAAAATT ATTTATTGAG	240
GTACCTCGAG	250

(2) INFORMATION FOR SEQ ID NO:6:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GAATTCGGCC TTCATGGCCT AGGTGCTGGA AGTAAGCTGT GTGAACAAAT GAGACGATTC	60
CCCTTTCTAA TGAGTTTATA TGCAATGTGG TATCTTTACC GATACATGCT CTGTCAGAAA	120
GAAGCAGCCC ACTTCTGTCC AATAGCCAAT CCGGCTTCAG GAGCAGCAGG AGAGGCTTCG	180
GGAACGGGAG AAGAGGCTTC AGCAGCTGGC CGAGCCACAG AGCGACTTGG AGGAGCTGCA	240
CGAGAACAAG AGCGCACTGC AGTTGGAGAG CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 284 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GAATTCGGCC TTCATGGCCT ACTCATCCA AAATAAAAAA AAAAATTTC CATGATCTTA	60
TCTAGCTTCT CTAGCAGTAC TTGTATGATT TCACCTTTCT TCCTTTATTC TTTCTTCCA	120
TATTTTTTTT TTTGAGACA GGGTCTCACT CTATTGTCCA GGCTAGAGTG CAGTAGTTTG	180
ATCATGACTC ACTCTAACCT GGACCTCCGG GGCCTAAGTA ATCTTCCAC CTCAGCCTCT	240
CAAGTAGCTG GGACTACAGG GATGTACCAC CATGCCTGGC TAAG	284

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```

GTTGAATTCT AGACCTGCCT CGAGGACGCC AGGGAAGTGA GTTGAAAATC TGAAAATGCG      60
GCCATGGACT GGTTCCTGGC GTTGGATTAT GCTCATTCTT TTGCCTGGG GGACCTTGCT      120
GTTTATATA GGTGGTCACT TGGTACGAGA TAATGACCAT CCTGATCACT CTAGCCGAGA      180
ACTGTCCAAG ATTCTGGCAA AGCTTGAACG CTTAAACAG CAGAATGAAG ACTTGAGGCG      240
AATGGCCGAA TCTCTCCGGA TACCAGAAGG CCCTATTGAT CAGGGGCCAG CTATAGGAAG      300
AGTGC GCGTT TTAGAAGAGC AGCTTGTTAA GGCCAAAGAA CAGATTGAAA ATTACAAGAA      360
ACAGACCAGA AATGGTCTGG GGAAGGATCT CGAG      394

```

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```

GCTGTGATGA AAATGCTTTA TGCTCAACA CTGTTGGAGG ACACAACTGT GTTGCAGC      60
CGGGCTATAC AGGGAATGGA ACGACATGCA AAGCATTTTG CAAAGATGGC TGTAGGAATG      120
GAGGAGCCTG TATTGCCGCT AATGTGTGTG CCTGCCCA CAAGCTTCACT GGACCCAGCT      180
GTGAAACGGA CATTGATGAA TGCTCTGATG GTTTTGTTC AATGTGACAGT CGTGCTAATT      240
GCATTAACTT GCCTGGATGG TACCACTGTG AGTGCAGAGA TGGCTACCAT GACAATGGGA      300
TGTTTTCAAC AAGTGAGAA TCGTGTGAAG ATATTGATGA GTGTGGGACC ACTCGAG      357

```

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

```

GAATTCGGCC TTCATGGCCT ATTTCCGATC TATGTATCTG TACTCATACA GCCTCATCGG      60
GCTAAACAGC CTTCTTTTCA GAACAGTAGA TCACTCAACT GGGTTTTCAA GTGACTGTTT      120
ACCTTTCAAG GCTGGCTTTA TAGGTCTTGC CTCACGTGAT CCAGCAATCC AAACTTTACC      180
CTATCCAGT CAGGACTGCA CACCTCATAT TGAAAGACAT ACCTTAGAAC CAGACTCCCC      240
AAACCTTACA AATATCCAC CTTGACTCC CGTTCTCGAG      280

```

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

GAATTCTAGA	CCTGCCTCGA	GCGCCACACA	GTGACTGCCG	GGTAAAGTTG	TGGAATTACG	60
TCCCTGGACT	CACCCCTGC	CTTCCTCGCC	GAGTCCTGGC	CATAAAGGGC	CGCGCCACCA	120
CCCTGCCCTG	ACCCTCCCCA	ACTCTCCCTG	TCTCTCTTT	CATTCTTCCC	CTCTTTCCTT	180
TTCCCTCTCT	TTCCCACTT	CGATATGAGC	TGCTTCTTAA	CGGTATGAGA	TTATTTNACT	240
CCTTCTTCTT	CCTTCCCTT	CCTGTCCTGC	CTGGCCTAGA	GAGGTGCCCT	GCCTGTCCCT	300
CCTGCACCCA	CCGTCCTTTT	CCAAGCATGA	ACAGTGGGAC	AGGCCCCAGG	AGATGGGTGC	360
CAGGGAGCAG	AAGGGGGAGC	CTTCAGGCCT	GGACAAAACG	AAACACCCCC	CCAAAAAAG	420
NAAACCCACG	ACTCGAG					437

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

GTTTCTTCTA	AGTAGATCTT	CCTTCCCAT	TAAACTAGGT	TTTCTACTGC	AAGATATTTT	60
GTGCATTGCT	GTTTAAACC	CTTTAACAG	CGAATCATAG	CAGTCTAAGA	AGTCTTCTGA	120
ACCATCCTGG	ACTCTTGGTG	TGATTTTAAA	TTGTGTCTAC	AAGTTCTCTG	ACATTCTTCC	180
CACCAAGAGG	TAGAGTCTGT	TTCCCTCCC	TTTGAACCTA	GGTAGGCCTT	TGTTACTGCC	240
TTGATGAATA	CAATGAGACT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

GATTTTTTAC	CCAAAGCTCT	GGAATTGTAC	ATTTATTTTT	TAAACTCAA	AGAGGGAAAG	60
AGCCTTGAT	CATATGTGAA	CATTGTATCA	TAGGTAATGT	TGTACAGACC	CTTTTATACA	120
GTGATCTGTC	TTGTTCTGTC	AGCAAAAATC	CTCTATGGAC	ATAGGAGGTG	CTGTGTCCCA	180
TGCCCTCTTG	CCCTGACAGT	GTCCCATGGG	CCCCCTTCTG	CTCCCTGCCC	CCTCCCTGCT	240
ACTGCTGATG	CACTCCCCC	CCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GAATTCGGCC	TTCATGGCCT	ATTTTTTATT	TGTTTTGTTT	TGTTTTGTGG	GGATGGGGTT	60
TTGCCGTGTT	GCCCAGGCTG	GTTTCGAATT	TTTGGGCTTA	TGCAATCCAC	CCACCTTGGC	120
CTCCCAAAGT	GCAGGGATTA	CAGGCATGAG	CCATCTTGCT	GGGCCACCTT	TTTCTTCTCT	180
TTTAACAAAT	TCAGCAATT	TTCAGTCCCA	GAAATCTGTA	AATACATTTT	TTGTGGAAAA	240
ATACAATGGG	AATGGCATCA	AAAGATGGTT	TCTATTAGGA	ATGGGAACAG	GTAACAGTTT	300
TCCCTGCCAC	CTCAACAATC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GGGCTGGCAG	GCGGGCCAAA	GGTAATGAAG	CAAAGAGAGA	GGGAAAAGAC	GTGTGAAAAT	60
TGCAGAGGGG	GTGACCGAGG	GAAACACGTG	AGCGTGATAA	TGACAGAAAA	ACCACGGGAG	120
GAGCAAACCT	GGGCAGGGGG	TGGGAAACCC	GGGCCGTTTC	CAGGGAGCAC	AGGCAGACTC	180
AGAGGTAACA	CTCAAAAGCA	ACAACAGAA	CAAGGAGGAA	GTGGGAAAAT	ATTTTAAATG	240
TGCTACAACG	AAACAGCTGC	CTGAATTCTA	TATACCCTCT	GAAAATAATC	TGCACATAAA	300
ATGGGAAAGC	TTACCGCAG	CAGACCCAC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

GAATTCGGCC	TTCATGGCCT	ATGCTTCTTC	CACGCACCAC	CACCACCACC	ACCACCATCA	60
TGGCCATAGC	CACGGTGGCC	TGGGGGTGCT	GCCTGATGGG	CAGTCCAAGC	TCCAGGCCCT	120
GCATGCCCCA	TATTGCCAAG	GACCGGGCCC	TGCCCCGCCA	CCCTACCTCC	CACCCCAGCA	180
GGCCTCTCTT	CCCCCACCCT	CCCAGCAGCC	CCCACCCTTG	CCCCACCTGG	GCTCCATTCC	240
ACCGCCTCCC	GCCTCAGCCC	CACCTGTGGG	GCCACATCGC	CACTTCCACG	CCCATGGCCC	300
AGTCCCAGGG	CCCCAACACT	ATACCTTGGG	CCGGCCAGGC	AGGGCACCCA	GACGGGGGGC	360
TGGAGGACAC	CCTCAGTTTG	CTCCACATGG	CCGCCACCCC	CTGCACCAGC	CCACATCCCC	420
ACTGCCCCCTG	TACAGTCCTG	CCCCCCAGCA	CCCTCCAGCC	CACAAACAGG	GCCCTAAGCA	480
CTTCATCTTC	AGCCACCACC	CATCTCGAG				509

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

```

GAATTCGGCC TTCATGGCCT AAAGATGGCG GAGAACAGCG GTCGCGCCGG CAAGAGCAGC      60
GGGAGCGGCG CGGGGAAGGG GCGGTGTGCC GCAGAGCAGG TGATTGCTGG CTTCAACCGC      120
CTTCGGCAGG AACAGCGAGG CCTGGCATCC AAAGCAGCTG AGTTGGAGAT GGAGTTGAAT      180
GAGCACAGCC TAGTGATCGA TACACTGAAG GAGGTAGATG AAACCTCGTAA GTGCTACCGC      240
ATGGTTGGAG GAGTGCTGGT GGAGCGAACT GTCAAAGAGG TGCTGCCCCG TTTGGAGAAC      300
AACAAGGAGC AGATACAGAA GATCATTGAG AACTGACAC AAGCAACTCG AG                352

```

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

```

GAATTCGGCC AAAGAGGCCT AGCTAGGTTT TGAAGCTTCT GAGTTCTGCA GCCTCACCTC      60
TGAGAAAACC TCTTTGCCAC CAATACCATG AAGCTCTGCG TGACTGTCCT GTCTCTCCTC      120
GTGCTAGTAG CTGCCTTCTG CTCTCTAGCA CTCTCAGCAC CAATGGGCTC AGTCCCCCCC      180
CCCGTACACG CCTCGAGGCA GGTGAGAG                207

```

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

```

GAATTCGGCC TTCATGGCCT AGGCGGGACT AACACAGGGT TGTCTCTTTT TCCTTTTGCC      60
AAGAAAGAAC ATTAATAATG ACTACCAGCA TCTGCCATCA CTAGCATTTT ATAAAAAGAG      120
GTTCTGTTAG CAACAGAGTA GAAACTGTAG GAAAGCATCT CAGAACAAAA CTAAGTTGAA      180
TAAATTCACC TAATAAAAAAT GCCTTGGTCT AGGATTCCTT TTCTTCATCA AAAGCTGCAA      240
GAGAAAGCCA CTGCTTACCT GATGCCGATT TACTGGTCAT TGGGGTGGGC AGGTTTGGTT      300
CTCGAG                306

```

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

```

GGTCTCACTT GTCTCATCCT GTCGCCCAGG CTGGAATGCA GTGGTATGAT CTCAGCTCAC      60
TGCAACCTCA GCCTCCTGGG TTCAAGTGAT TATCCTGCCT CAGCCTCCAA GTANCTGGGA      120
CTATAAGCAC ACATCACCAC ACCCAGCCAA TTTTGTGAA TTTTAAATAG GGTTCCTACTA      180
TGTGGGCCAG GCTGGTTGAA CTCCTATCCT CAAGCGATCC ACCCACCTCG GCCTCCCGAA      240

```

GTGCTGGGAT TACCTGAGCC ACCGTGCCCCA GCCCATTTC AGTACTTTT TATTTAACCC 300
 TATCGTGCTA GGGCACCATG CAATATACAG CTATTTTCATT TTCCTTTTGT CTCTGTTTCT 360
 TAGGTGGTCT CGAG 374

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC 60
 AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT 120
 GTCCTTCACA CTAGCTACAT GATTATAGT CTGCTCCCC AATATGTTAT GTATGGAAGC 180
 CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCCTT 240
 TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG 300
 CTCGAG 306

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

GGTAGAGATA ACAAACAGG ATACCAAAGT TGAGCTGGAG ACTTACAAGC AAATCGGCA 60
 AGGTCTGGAT GAAATGTACA GTGATGTGTG GAAGCAGCTA AAAGAGGAGA AGAAAGTCCG 120
 GTTGGAACTG GAAAAAGAAC TGGAGTTACA AATTGGAATG AAAACCGAAA TGGAAATGTC 180
 AATGAAGTTA CTGGAAAAGG ACACCCACGA GAAGCAGGAC AACTAGTTG CCCTCCGCCA 240
 GCAGCTGGAA GAAGTCAAAG CGATTAATTT ACAGATGTTT CACAAAGCTC AGAATGCAGA 300
 GAGCAGTTTG CAGCAGAAGA ATGAAGCCAT CACGCTCGAG 340

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

GAATTCGGCC AAAGAGGCCT AGATTTTAAA TTTGTTTGAT ACCTGCTGTG TATTCCTTGC 60
 ATACCCAGCA CATTGTTGCC CATATGTTG ACATGTAGTA TGTATTTATT ACAATTATAT 120
 GATTAATGAA ATGTATCTTA TTTTTCAT GTATAGCATG TACAGTCACA CTCGAG 176

(2) INFORMATION FOR SEQ ID NO:24:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 414 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```
GAATTCGGCC AAAGAGGCCT ATTCTTTGTC TTTTGCACAT GTTCTTTGAG TCTTAGTATC   60
TGTAACGTGG CGCTACTCTC TCTATCATGG GGGGGCATGT TTTGACATTA AATTGACTTT   120
TAAGAAAAAC ATGTCACTAA CCTGAAGCTC AGCCACACAG TGACTTTTAA GGTTTTATTT   180
AGACTTTACT GTTGTCTCA TGAGAGTAGG TACAGACTGC ATAAGGTTTA GAATCCCAGC   240
ATATGTCTGA AACGACGGGA CTTTCACTGT GATTCCACC AGAGAAATTA TAGCAGAGTG   300
GCTGAGCATG TGCTCTGAGG CCAGGCCCCA GCTCTGCTGC TGACGAGCTG TGTGGTCCTG   360
GGCAGAGTGG TCTCCGAGTT CCAGTCCCTC CTCTGTAAAA TGGGCTTACT CGAG       414
```

(2) INFORMATION FOR SEQ ID NO:25:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 497 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```
GAATTCGGCC AAAGAGGCCT AAACATATAC CTAGTCTATA CTCTCTCTTA TCTCTGAACA   60
CTTTTCATCT GGAGCTATTA ATGCCCTCTA GCCTTTATTA TAATTATCAC ATATAATTAT   120
GCCTTTTCTC CTCAAAATTA TCTGTTGGAG TCATCTTATA GTAGAGTCTT TACAGAACAC   180
AAAGCATTCA ATCACTTTAT TTCAGACACC AACCTTGTTT TTGATGAACA TATGTTAGTC   240
TTAAGCCATC TAAAGTAATG CTAATGTGGG ATCTTATGGA AGACTACTGG TAATACAGGA   300
AAAAAAGTGG CAAAGAAATC TGACACGTTT GGCAATTATT CCTGAGGCTC TGACCTCTCA   360
ATTGTTGAGT GTTGGAGGTC ACAGTAAACA AACCATATAA AGATCATGTT GAAAGTCAAC   420
ATTATTAATA TACCATACTT GAAGGATATG TGGTTATTGT CTCACGTGTC CATGTGAAGA   480
GACCACCGTC CCTCGAG                                     497
```

(2) INFORMATION FOR SEQ ID NO:26:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

```
GAATTCGGCC AAAGAGGCCT AGTTTTTGAT GAATTTGTGT TATTTACTTA TAACTAGAGT   60
TTGAATGTTT ATTGGGAAAA CTTAATCATG ATCATCTACT GGTGGCTCGA G          111
```

(2) INFORMATION FOR SEQ ID NO:27:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC	AAAGAGGCCT	ATGCAATTCT	GACCAGGAAG	CTCCTCTTTA	ATTGGAAATT	60
CTTAGAAAGG	TATGGAGCAA	AGGAGATCCC	AGCAAACATT	CCGGCATCTA	CTGCTCTTGG	120
GTTTTTCTG	TGTTGGTTT	TTTGTTTTG	TTTGTTTAT	GAGATGGAGT	CTCACTCTGT	180
CGCCAGGCT	GGAGTGCAGT	GGCGCAATCT	CAGTCTACTG	CAATCTCCAC	CTCCAGAGTT	240
CAAGTGAATA	TCCTGCCTCA	GCCTCTCAAA	CAGCTGGAAT	TACAGGTATA	CACCACCACA	300
CCGAGCTCGA	G					311

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 597 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC	AAAGAGGCCT	AAGTGCAGTG	GTGCGATTAT	AGCTCACTGT	AGCCTCAGAA	60
TCCTGGGCTC	AAGCTGTCCCT	CCCACTTAGC	CTCCCAAAGT	GCTGGGACTA	CAGGCGTGTG	120
CCACGGGGCC	CAGCCATTTT	TTCGAATATT	TTCAATCTGC	AGTTGTTTGA	ATCCACAGAT	180
GCAGAACCBA	TTTCTAATGG	AGGGCTGACT	ATACCTTTCT	GATGACCTAA	ATATTTGTGT	240
CCACTATTGG	GACACTCCTT	TCTTAGTGTC	AAGGTTTGTG	AGAAATTGAG	GGCTGTTTGA	300
TGGGCAAGA	TTTATTTATT	TATTTACTGG	CTTATCTACA	ATTGAGACAG	GGTCTCACTA	360
TGTTTCTCAG	GCTAGTTCTA	ACTCCTGGGC	TGAAGCAGTC	CTCCCATCTC	AGCCTCCCAG	420
AGTGCTGGGA	TTACAGGTGT	GACACACCAT	ACCCGGCAGA	GCAAAGAGTT	AAGAGTACAA	480
GACATTTGAT	CATCTTGAGG	AGTATTTACT	TCAGACTGAA	ACACCACATG	AAATTTCTAGA	540
GTCCAACAGA	AAGTGTAATA	ATTTTTTGCT	TTTCCCTTCT	TCCGCTACAT	CCTCGAG	597

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 506 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

GAATTCGGCC	AAAGAGGCCT	AATTCTAGAC	ATGCTCAGCT	TTGTGGATAC	GCGGACTTTG	60
TTGCTGCTTG	CAGTAACCTT	ATGCCTAGCA	ACATGCCAAT	CTTTACAAGA	GGAAACTGTA	120
AGAAAGGGCC	CAGCCGAGAG	TAGAGGACCA	CGTGGAGAAA	GGGGTCCACC	AGGCCCCCCA	180
GGCAGAGATG	GTGAAGATGG	TCCCACAGGC	CCTCCTGGTC	CACCTGGTCC	TCCTGGCCCC	240
CTGTCTCGG	TGGGAACCTT	GCTGCTCAGT	ATGATGGAAA	AGGAGTTGGA	CTTGGCCCTG	300
GACCAATGGG	CTTAATGGGA	CCTAGAGGCC	CACCTGGTGC	AGCTGGAGCC	CCAGGCCCTC	360
AAGGTTTCCA	AGGACCTGCT	GGTGAGCCTG	GTGAACCTGG	TCAAACCTGG	CCTGCAGGTG	420
GTCGTGGTCC	AGCTGGCCCT	CCTGGCAAGG	CTGGTGAAGA	TGGTCACCCT	GGAAAACCCG	480
GACGACCTGG	TGAGAGAGGC	CTCGAG				506

(2) INFORMATION FOR SEQ ID NO:30:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

GAATTCGGCC AAAGAGGCCT AGTCTGTGGT CATTTTCAAC TCTCATTAT AGGATTCTAA	60
AAGGGCACTA CATTACTCCA CTCCCTTATC TAAAATAAAT TTAAAATTCA TCGGAATTTG	120
TCCAGTCCTC CATCACTGGA AAATGTACAG ATTCCTTCTC TGGAAATATC TAAAGAAAAG	180
TACAGCTAAT GTTCCCCCAT TTCGTGTTGT TTGTTGCTG CTTTAACTAT GAACTCATCT	240
GGCCGGGCGC AGTGACCAAG CCGCCGGGAG CTGGGGAGAG ACGCACCGGG GCGGCGACTG	300
GGCCAGGAGA CCAGAACACT CGAG	324

(2) INFORMATION FOR SEQ ID NO:31:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

GAATTCGGCC AAAGAGGCCT AGGAGCAGAT TCCTCATGGT GCTTGTTTAT TATATATATT	60
TAATCCTGCT TGACACTTTA CCCAAGGGAG ATGGTCCCTT TTATCAGTTG AATGTTAGCA	120
GCGTTATTTT AGAGTGTGGT GACTGGTTAG AGAAACTCAT GTACTCAACC AGCCACAGTT	180
TCAACAACAAA TTTTATGTG CAAAGGACAG CAACCTTCTT GTATGTTAAA CCACCACTAC	240
TCGAG	245

(2) INFORMATION FOR SEQ ID NO:32:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 225 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

GAATTCGGCC AAAGAGGCCT AGGTGCTTTG GTTTTGTGCT TTTTAGTCAT CCCCATGAGA	60
ATAATAAACT CCATGAGGGC AGCAACTTGG CTGGCCTGTG TGCCAGTGCT GGGGACATCA	120
CTGAGAAATG AAGGCCCAT TGGCAGGCTA TTTTGTAGCA AGATTCCTGA GGCCCAATCG	180
TTGGGTGATG AGATGGACCC GAGGTATTTT ACTCCAGCTC TCGAG	225

(2) INFORMATION FOR SEQ ID NO:33:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 447 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

GCCAAAGAGG	CCTAGAGAGC	TCTGGGGGGC	AACCTGGAGG	TCTGAAAAGA	GGAGCCAGAG	60
AAGGTGGTAC	CAGGCTTCCT	GGTCAGAAC	GGCCTGGAGC	TCCTTCCCTT	CCCCCTGGCC	120
TGAGAGGTG	CTTTAAGTC	TTCCACCCCT	TGTTCCATCT	GCCTGCCAAC	CCATCGGAAA	180
GGAATCCACA	TCATATTGGA	GATGACCCCA	TCAACCCAG	GGCTCCAGCA	CTACCAAGTT	240
GGAATTCCAC	GCCCAGGAGT	GGGGTAGAGG	AAGACGAGAC	AGGACGAGGC	AGAAAAGCAC	300
ATTTTAAAAA	CCAGACAAGA	TGGCTAGGCC	ATCACCAACC	AACGGACTTA	CCTTACATT	360
TTGTAGGTAA	TTCCCCCAA	ATCTTGATTT	TTTTTTCCT	CAATTATCCT	TTAAAAATA	420
AGAAAACACA	TTCAAACCC	ACTCGAG				447

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 402 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

GCGATTGAAT	TCTAGACCAT	GCCTGCTCTG	GGCCAGCTC	TTCTCCAGGC	TCTCTGGGCC	60
GGGTGGGTCC	TCACCTCCA	GCCCTTCCA	CCAAGTGCAT	TCACTCCCAA	TGGCACGTAT	120
CTGCAGCACC	TGGCAAGGGA	CCCCACCTCA	GGCACCCTCT	ACCTGGGGGC	TACCAACTTC	180
CTGTTCCAGC	TGAGCCCTGG	GCTGCAGCTG	GAGGCCACAG	TGTCCACCGG	CCCTGTGCTA	240
GACAGCAGGG	ACTGCCTGCC	ACCTGTGATG	CCTGATGAGT	GCCCCCAGGC	CCAGCCTACC	300
AACAACCCGA	ATCAGCTGCT	CCTGGTGAGC	CCAGGGGCCC	TGGTGGTATG	CGGGAGCGTG	360
CACCAGGGGG	TCTGTGAACA	GCGGCGCTG	GGGCAGCTCG	AG		402

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 307 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

GAATTCGGCC	AAAGAGGCCT	AGTGGAAGAT	TTGGGTACTG	TCTTTAATAA	ATCAATCAAT	60
CGACTCTTAT	TTCAAGGAGA	AAGTTCTATG	TTATATGTTG	AAGGTGAACA	GATCATATTT	120
AGAGGATATA	ACAATTAGAA	ATCTAGAAAA	TAATTATCAC	TTTTATAAAA	TTTTTAGTCA	180
ACTGTACAAA	TAATTACATA	AAACATCAAT	TAATTATGCT	TAAAAATCAC	TAATGTTTAT	240
AATATATAAT	CACTATTTGT	AATCAAAAGT	TTAATTTTAT	GCCAAAAAAT	AAAAAATGCT	300
TACTCGA						307

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 324 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

GAATTCGGCC	AAAGAGGCCT	ACTTCCATAA	CCGTGCTTTT	GACGTTAAAA	ATTTTAAATT	60
CAGCCTTTTG	GAGAACACTA	AGTATCTTAG	TGTGTTTTTA	CTTACTATAA	TAATATTATT	120
GACCTAGTGT	AATATTACTG	CCATATGGAC	CTCAAGGGTA	CTTTTCTGAT	AAATTTCTGT	180
TATGGTTTCA	TAATTAAACA	AAAGGATAAT	ATACAGAGTT	GTGGAGTTTT	TTTGGTTTTG	240
TTTTGTTTTG	AGATAGCCTG	GGCAACGAGT	GAAACTCTGT	CACACACACA	CACACACACA	300
CACAGACACA	CACCAAATCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 426 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

GAATTCGGCT	TCATGGCCTA	CAAGAAGATG	AAGAAGATTG	TGGATGCCGT	GATCAAGTAC	60
AAGGACAGCA	GTGGACGTCA	GCTCAGCGAG	GTCTTCATCC	AGCTGCCCTC	GCGAAAGGAG	120
CTGCCCGAGT	ACTACGAGCT	CATCCGCAAG	CCCCTGGACT	TCAAGAAGAT	AAAGGAGCGC	180
ATTCGCAACC	ACAAGTACCG	CAGCCTCAAC	GACCTAGAGA	AGGACGTCAT	GCTCCTGTGC	240
CAGAACGCAC	AGACCTTCAA	CCTGGAGGGC	TCCCTGATCT	ATGAAGACTC	CATCGTCTTG	300
CAGTCGGTCT	TCACCAGCGT	GCGGCAGAAA	ATCGAGAAGG	AGGATGACAG	TGAAGGCGAG	360
GAGAGTGAGG	AGGAGGAAGA	GGGCGAGGAG	GAAGGCTCCG	AATCCGAATC	TCGGTCCAGT	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 482 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

GAATTCGGCC	TTCATGGCCA	ACACATAATC	CACGCTCATC	TTGCAAAGCG	CTATTTTCAGG	60
CACATCATTG	GAATACAGGA	AGTAGCCCTG	CACCTGCCAG	TGAGCTCGCC	ATTCAGTGAT	120
TGGAAGAGTG	ACCTGGCATC	TTGGAAATCA	TTGTGTGTCT	TCAGGAGAAT	GTGCAGTGTC	180
TTGTAACAAC	TAATTATAAT	GCAAATTAGG	GCTACATTGT	AATCTGCTTT	GTTAATGAAA	240
ATGATAAAAC	AGAATATTGA	CAAGCTAGGA	CACCTGTGGT	ATCTTTAATT	GTATCTCCTT	300
CAGAAGTTTG	CTTCTTATGG	TATAATAAAG	TATGGAAGAA	TATTGAGTAT	ATGTTTACTC	360
TGGGCCTGGG	AGAACTTAAC	TTTCTAGAGC	AGTTTGTTGA	CTTGTGTGCA	ATGGGGAGAG	420
GTACCATGAT	GACACTCACA	GGGAGCCACT	GTTCACTGAC	ACTTGAAGG	CCCTGCCTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:39:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 363 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```
GTGTTTGCCC ACACCCTCCT TGAATTTAAC TGCCACAATC TATCCGCAGA TGTGTTTGT      60
TCTGTTTCTT GTTTTTCAC T AGCGTTTGCG TTGCTTCCTC TGAAGCCAGA GGGTGAAAGG      120
CCCTAGCAAA GTTAGTTATC AGTCAACTGA TGATAACTGT GATCCTTAAA GATGAATTCC      180
CAGCCTGAGG TGACACACAG AGGTTTCAGCA GACGTCCTCAG GATCTGTCAC ATGTCATGTT      240
GCTTGGTGTG AAGATGGAAG AACAAAGTCC ACATCAGTTT CTGCTCCTTC AAACAGTGTG      300
TCGATATGAA ACATTGAGAT TTGGCAGAAA CATGTGCCTA GTTTGCAGCA CCAAATACTC      363
GAG
```

(2) INFORMATION FOR SEQ ID NO:40:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 336 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```
GAATTCGGCC TTCATGGCCT AAAGGGATAT TCACTCAAAT CCCTAAGTAT TTCAGAAACA      60
GCCTGAGAGC AAGTCCTTGG CTTGCTTTC TAGTTTTAAA AGGCTTTTAA CTGTTTAGTC      120
TGAGATTCCC CTAAAAGTTC CAGGAAAGCA AACTCAAAAA GAGCCTAGGT GGTCAATCAT      180
TATTTTGTCT GCGTTTATAT AAATAATCAG GCCAAGTTAA TGAGACTAAA CTTATTTTGC      240
AAGCAAATCA GTCTTTGCTT ATTTTGGTA GGAATGGGGG TAAATGGAGA GAGAGAAATT      300
ATGTTTCAGA AGAAAACTAT AGCACACCAA CTCGAG      336
```

(2) INFORMATION FOR SEQ ID NO:41:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```
GAATTCGGCC TTCATGGCCT AGTGGGAAAC ATTATTTCAA GACATTAGGG ATAAGAATGC      60
CAGTTGCTAC TGAGTTGGTT ATTGTTTCAA GGATTTATCA ATACATAGAG CAAATAATTA      120
TGTTTGTCTT TGTCTTATT TTATTTCTTT ACTTTAGAAA CAGTACAGCT ACTTACAAAT      180
CAAGTTTAGA ACTCTCAGGT TATCTTAAAT CTGAAGCTTC TACCTTCCTA AGAACAAAAC      240
ACCGGCTCGA G      251
```

(2) INFORMATION FOR SEQ ID NO:42:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GTTCAACCAG TTCAAATACT TTTTCAACCT CTATTCTTA CTTCTTGCCT GCTCTCAGTT	60
TGTTCCCGAA ATGAGACTTG GTGCACTCTA TACCTACTGG GTTCCCCTGG GCTTCGTGCT	120
GGCCGTCACT GTCATCCGTG AGGCGGTGGA GGAGATCCGA TGCTACGTGC GGGACAAGGA	180
AGTCAACTCC CAGGTCTACA GCCGGCTCAC AGCACGAGGC ACAGTGAAGG TGAAGAGTTC	240
TAACATCCAA GTTGGAGCCC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:43:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 437 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GAATTCGGCC TTCATGGCCT AAGATGATTG TGCTATTATT GTTTCCTTG CTCTGGATGG	60
TGGAAGGAGT CTTTCCCAG CTTCACTACA CGGTACAGGA GGAGCAGGAA CATGGCACTT	120
TCGTGGGGAA TATCGCTGAA GATCTGGGTC TGGACATTAC AAAACTTTTCG GCTCGCGGGT	180
TTCAGACGGT GCCCAACTCA AGGACCCCTT ACTTAGACCT CAACCTGGAG ACAGGGGTGC	240
TGTACGTGAA CGAGAAAATA GACCGCGAAC AAATCTGCAA ACAGAGCCCC TCCTGTGTCC	300
TGCACCTGGA GGTCTTTCTG GAGAACCCCC TGGAGCTGTT CCAGGTGGAG ATCGAGGTGC	360
TGGACATTAA TGACAACCCC CCCTCTTTCC CGGAGCCAGA CCTGACGGTG GAAATCTCTG	420
AGGGCGCCAC ACTCGAG	437

(2) INFORMATION FOR SEQ ID NO:44:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 242 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC TTCATGGCCT AGTACCTTAA AAACCTTGA AATAATAATA ATAATAATAA	60
ACAAAAAATA ATCCCAAACC CCGTAAGTTT AACTTTCTAT GCTTTGGCTG TTTTGGTTT	120
ATTTTTGTT TTTTGAAGG GGTCTCGCTC TGTCGCCAG AATGGAGTGC AGTGGCTTAA	180
TCAGGGCTCA TTGCAGCCTC GACCTCCTTG GTTCGGGCGA TCCTCCTCCC TCCCACTCG	240
AG	242

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 264 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

AATTAAATTA AATTAAATC TTTGTTACAA ACTATGAAAA TGAATATAAG TAAATTTTCAT	60
ATCATTTCTT TTCTAGATTT ATTATCTAGG ATAGATTTGG ATGAACATAAT GAAAAAAGAT	120
GAACCGCCTC TTGATTTTCC TGATACCCTG GAAGGATTG AATATGCTTT TAATGAAAAG	180
GGACAGTTAA GACACATAAA AACTGGGGAA CCATTGTGTT TTAACACCG GGAAGATTTA	240
CACAGATGGA ACCAGAAGCT CGAG	264

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

GAATTCGGCC TTCATGGCCT AACCTGGAGA AACTATTTAA GTTGGATGAA GCAAGTGCCC	60
AGCTCCTTGC TTATAAGGAA AAAGGCCATT CTCAGAGTTC ACAATTTTCC TCTGATCAAG	120
AAATAGCTCA TCTGCTGCCT GAAAATGTGA GTGCGCTCCC AGCTACGGTG GCAGTTGCTT	180
CTCCACATAC CACCTCGGCT ACTCCAAGC CCGCCACCCT TCTACCCACC AATGCTTCAG	240
TGACACCTTC TGGGACTTCC CAGCCACAGC TGGCCACCAC AGCTCCACCT GTAACCACTG	300
TCACTTCTCA GCCTCCACAG ACCCTCATTT CTACAGTTTT TACACGGGCT GCGGCTACAC	360
TCCAAGCAAT GGCTACAACA GCAGTTCTGA CTACCACCTT TCAGGCACCA TAGTGACTCG	420
AG	422

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

GAATTCGGCC TTCATGGCCT ACCGAAGGGC ATCCCATCGG TTGGGTAGGT CATGGTTAAA	60
AAATCATCTC CTTTGGTTGC ATATTTAATT ATTTTCCACT ATTTTTCCT CACACAAAAT	120
GATTTTGCCC GGTACCCTTT TTGGGGGTGC ACAGTCCATG AGATGAATAT TGAATGGGGA	180
GACCTGGGTT CTAGTCTCGC ATTTACCAGT CAGGTTACAA TGCGACCTTG AGCAAGTCAC	240
TTACCTCCC AGCGCCTCAG TTTCCTCATT GTAAGATAGG AAAAGCCTTG TCATTTTAA	300
AATTTTATTT TTGTCATATA CCTCATGGCG AACTCGAG	338

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

GAATTCGGCC	TTCATGGCCT	ACTATGCTCT	GCACGTGGGT	CATTTCCTAC	TGGTTTCTAA	60
AAGCCTTTCA	TTTTCTGCCT	GTACACAATA	GCCCCCTTCC	TCCATTGTTT	TTAGGATCCT	120
TTTTCTCTT	ACCAGCTGTT	AACCTGGAAG	TATTCTTCT	TCATCCCGAA	TCTCCCATGT	180
CCTCCCCACT	TCTATTGTT	TCCATCCAAT	GTGGATTCA	GATCATTITA	TGGATTTTAA	240
ACTACTCTGG	GGCTACCCCTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

GAATTCGGCC	TTCATGGCCT	AGAAACACAT	GTGATCTGTA	CTCATGAGAA	CCTGTAGTTA	60
ACTATACGAG	CCTTGCTGTG	CATTGTGTT	TTATCTGAGC	CTGTCTTTCA	ATGTCCTATC	120
CCTTGAGAGA	ACTGAGGGCT	GAGAACCAAG	CTTCCGAAG	CGGTCTGAGT	GTGAGCGGTG	180
GTAGTGGTCT	CTGGAGAAAA	GAATGGAGAC	AGGATAGGAC	TTGAGAAGA	GTGAGTCATT	240
GTTACCCAGA	AACCCTGGAG	AACACTGGAC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

GGGCGTTCTC	ACGCCCCGAA	CAATTCCTGA	GTAGGGCCTT	GCTTGAGTTC	TTCCGAAAGT	60
CTCATCCACC	CCCACATCGC	CTCTTAGGA	AGTCACTTAA	TGTTGGGCTT	CATTATTCCC	120
ACATCCCTTT	CCTTACTACT	TGCCTGCACT	TCTTGAGAAA	AAGACTGCAG	AAAGGAGAGG	180
TGGGGCTTTC	AGTAGAAACA	AGCAAACGCG	AGGTCCCTGT	GGGGGGACTC	TCCAGGAAGA	240
AGGGTAATTT	CCTGCCTCCT	TAAATGGCT	GCTACTGTCA	GTTATTTTGC	TCCCAACCCC	300
AGAGCTTCAC	TTGCTCCTTC	ACTTCCCAGT	TCCGCAAGAA	CCGTGGGCGA	CAGTTATGGA	360
GAAGCGTCTG	CAGGAGGCTC	AGCTGTACAA	GGAGGAAGGG	AACCAGCGCT	ACCGGGAAGG	420
GAAGTACCGA	GATGCTGTGA	GTAGGTACCA	TCGAGCTCTG	CTTCAGCTGC	GGGGTCTGGA	480
TCCGAGTCTG	CCCTCTCCGT	TACCTAATCT	CGGACCTCAG	GGCCCGGCCC	TCACGCCTGA	540
ACGACCTGCC	TCGAG					555

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

GTGAAGATGG	ACTGCTCTGG	GGCCCATGTG	CAAGTGACCT	GTGCCAAGCT	CATCTCCAGG	60
ACAGGCCACC	TGATGAAGCT	TCTCAGTGGG	CAGCAGGAAG	TAAAGGCATC	CAAGATAGAA	120
TGGGATACGG	ACCAATGGAA	GATTGAGAAC	TACATTATG	AGAGCACAGA	AGCCCAGAGT	180
GAACAGAAAG	AGAAGTCGCT	TGAGCTCAAA	AAAGAAGTTC	CAGGATATGG	CTATACTGAC	240
AAACTCATCT	TGGCATTAA	TGTTACTGGA	ATACTAACGA	TTTGATTAT	ACTTTTCTGC	300
CTCATTGTGA	TATGTTGTCA	CCGAAGGTCA	TTACAAGAAG	ATGAAGAAGG	ATCACTCGAG	360

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GAATTCGGCC	TTCATGGCCT	AGCTCCTGCG	TAAAGGAGCA	TGAGAGCGTG	GGAGTTTTGC	60
AGTGCCCGTG	GGGTTCTTCG	TCGCGTCTCG	GTCCGGCGTC	GCTTTCTGCA	GCTCCTGTCA	120
GGGAGCGCGA	GGCCTGTTAT	TAACCGCGGA	GCGCTTTGTC	ACGAANTCCC	TGTGGCGTCT	180
TGAAGAAGGC	ATTCCCCACC	CGCCAAATGG	CGTCCATGCC	CCGACGCCCC	GAGGCCCAGG	240
AGAGTCGAGG	TACCTTTTTT	GTCCAAGTTT	ATNGCTGCTT	TCGGTCTCTG	CCTGACCCCN	300
TCCTTTGGAG	GAGAGTTGGG	CATGCCTGTT	GTGGTAGGAG	TGCTCNTGAG	CCCCAAATAG	360
CCCTTTGACC	AAGTGTCTT	CGTTCCAAGA	CCACACACAT	AATGGTTTAC	CAACTTCNTT	420
CTTTCAGAAC	TACCAACTGG	GAGCAGGGAC	CTGTGGAGGA	ATCTCTGAGA	GAGTTTCTCA	480
ATGTCTTATC	TGTTTGTTTT	GTTTGTGTTG	GAGATAGGGT	CTGGCCTTGT	CGCTGGAGTG	540
TTGCTTGCTT	GGCTGGAGTG	CAGTGCTGAT	ATCATAGCTC	CGTCTGGAAC	TCAGGGAATC	600
CTTACGCCTC	AGCCTCTCGA	G				621

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

GAATTCGGCC	TTCATGGCCT	ACAATTTGGA	GCAAGGCTTA	GCAGAAGACG	GCGGCATGAG	60
CAGCGTGACT	CAGGAGGGCA	GACAAGCCTC	TATCCGGCTG	TGGAGGTCAC	GTCTGGGCCG	120
GGTGATGTAC	TCCATGGCAA	ACTGTCTGCT	CCTGATGAAG	GATTATGTGC	TGGCCGTGGA	180
GGCGTATCAT	TCGGTTATCA	AGTATTACCC	AGAGCAAGAG	CCCCAGCTGC	TCAGCGGCAT	240
CGGCCCGATT	TCCCTGCAGA	TTGGAGACAT	AAAAACAGCT	GAAAAGTATT	TTCAGACGT	300
TGAGAAAGTA	ACACAGAAAT	TAGACGGACC	TCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:54:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

GAATTCGGCC AAAGAGGCCT ACATTACTGG GTTAGAAAAC AAAGAGGGAG TGCCCTGCAC	60
ATTTTCTTTT GTGCTTTTAA ATGTTTCTTA AGTTGGAACA GGTTTCCTCG GGCCTGTTTT	120
GACTGATTGC TGGAGTGCAT TTGATAGTTA AAAATTACTA ATTGGTTTAA TTCCCTTCA	180
CACTCTGCCT CCCCTATTTT CCCCAATTGA CCTAAACCT CGAG	224

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 249 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

GATTTAATGC ATGCTAGCAA CAGCCTTAAC TTTGGATTCA GTTATTTGAA ACACCTTTTC	60
GGCATCTTTC CCTTTCTAAT GTTGTGGGGT GGAAACCGGA TGGCAAATCA CTGTGAGCCG	120
GATACCTCAG CACAGTCCAC CTTGTGTGTG ACTTCACAAA TGGGGGACTT CACAAATGGG	180
GTAACCTGAAT GTTATTACTT TCAAATTTTG ACATGGAGCA TTATGATCAA GGAAATGGAG	240
CAACTCGAG	249

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

GCTGCGCCGC ACCCTGAGAG ATGGTTGGTG CCATGTGGAA GGTGATTGTT TCGCTGGTCC	60
TGTTGATGCC TGGCCCCTGT GATGGGCTGT TTCCTCCCT ATACAGAAGT GTTTCATGC	120
CACCTAAGGG AGACTCAGGA CAGCCATTAT TTCTACCCC TTACATTGAA GCTGGGAAGA	180
TCCAAAAGG AAGAGAATTG AGTTTGGTCG GTCCTTTCCC AGGACTGAAC ATGAAGAGTT	240
ATGCCGGCTA CCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 229 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

GAATTCTAGA CTTTGTCTCC AGAGCATTGC CTTTATAAGC AGATTGGCAC CAACAGTTCC	60
ATAGTTTAAC ATCTAGTTAA GCTACAAATA TAGTATAAGC ATTATTAGCA GCTGGTACTT	120
CTGCTAGGGG TTGTAAATTC CAGGTGTTAC ACTGACCTCA ATCCAATTTA CATAATTTAC	180
ATAAATGCAT CTCGGTGGAA AAATAATCAT TTTCTTGGCA TATCTCGAG	229

(2) INFORMATION FOR SEQ ID NO:58:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

GAATTCGGCC TTCATGGCCT AACTGCTAT GTATGTTTTC TCCTTAATGA TGAAGAGTGT	60
AGATGATGCT AATAATAGTA GCTGATGTAC TGACTTTTAG CTGTGTGCAA AGCCATGTTC	120
AAAATACTTT ACAAGTGTTA ACTTGTTTGA TCTTCACAAC AACCCTAAGA AGTGGATATT	180
ATTAAAGTAG ATTTTGAAG ACTGATCTAT TTAATTATTA ATAGATCTGT CTCATTCTCT	240
TTTTCCCCCA ACTCGAG	257

(2) INFORMATION FOR SEQ ID NO:59:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 223 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

GAATTCGGCC TTCATGGCCT ACGCGTCTGC TTCGGAGACC GTAAGGATAT TGATGACCAT	60
GAGATCCCTG CTCAGAACCC CCTTCCTGTG TGGCCTGCTC TGGGCCTTTT GTGCCCCAGG	120
CGCCAGGGCC TTTTGTGCCC CAGGCGCCAG GGCTGAGGAG CCTGCAGCCA GCTTCTCCCA	180
ACCCGGCAGC ATGGGCCTGG ATAAGAACAC AGTATCACTC GAG	223

(2) INFORMATION FOR SEQ ID NO:60:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 171 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

GAATTCTAGA CTGCAATGTC CCAGTGTGAA ATTTCAACAC GGCATTTTCT GCATCCTTTC	60
ATGGCCATCC AAAGGATTCC GCTGCAGAAA TTATTGATGT GCTATTTTTC CTGCTCTGTG	120
ATGCAGGCTG CTTTGGGCCC CTGGTCACT CTTCCAAGGC TGCAACTCGA G	171

(2) INFORMATION FOR SEQ ID NO:61:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 336 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

GAATTCGGCC	TTCATGGCCT	AAAAAGCAAA	AGAAAAGTAA	AAGGAAGAAA	CAAGAACAAG	60
AAAAAAGATT	ATATTGATTT	TAAATCATG	CAAAAAGTGC	AACTCTGTGT	TTATATTTAC	120
CTGTTTATGC	TGATTGTTGC	TGGTCCAGTG	GATCTAAATG	AGAACAGTGA	GCAAAAAGAA	180
AATGTGAAA	AAGAGGGGCT	GTGTAATGCA	TGTACTTGGA	GACAAAACAC	TAAATCTTCA	240
AGAATAGAAG	CCATTAAGAT	ACAAATCCTC	AGTAAACTTC	GTCTGGAAAC	AGCTCCTAAC	300
ATCAGCAAAG	ATGTTATAAG	ACAACTTTTA	CTCGAG			336

(2) INFORMATION FOR SEQ ID NO:62:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 212 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

GAATTCGGCC	AAAGAGGCCT	AGAAGAGCAA	GCGCCATGTT	GAAGCCATCA	TTACCATTCA	60
CATCCCTCTT	ATTCCTGCAG	CTGCCCTGCG	TGGGAGTGGG	GCTGAACACG	ACAATTCTGA	120
CGCCCAATGG	GAATGAAGAC	ACCACAGCTG	ATTTCTTCT	GACCACTATG	CCCACTGACT	180
CCCTCAGTGT	TTCCACTCTG	CACGCTCTCG	AG			212

(2) INFORMATION FOR SEQ ID NO:63:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

GAATTCGGCC	TTCATGGTCT	ATGCTACTCA	GTTGGATCTA	GCAGAAACAA	AAGCTGAGTC	60
TGAGCAGTTG	GCGCGAGGCC	TTCTGGAAGA	ACAGTATTTT	GAATTGACGC	AAGAAAGCAA	120
GAAAGCTGCT	TCAAGAAATA	GACAAGAGAT	TACAGATAAA	GATCACACTG	TTAGTCGGCT	180
TGAAGAAGCA	AACAGCATGC	TAACCAAAGA	TATTGAAATA	TTAAGAAGAG	AGAATGAAGA	240
GCTAACAGAG	AAAATGAAGA	AGGCAGAGGA	AGAATATAAA	CTGGAGAAGG	AGGAGGAGAT	300
CAGTAATCTT	AAGGCTGCCT	TTGAAAAGAA	TATCAACACT	AAACTCGAG		349

(2) INFORMATION FOR SEQ ID NO:64:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 391 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

GCGGGCTAGT	CATGGCGTCC	CCGTCTCGGA	GACTGCAGAC	TAAACCAGTC	ATTACTTGTT	60
TCAAGAGCGT	TCTGCTAATC	TACACTTTTA	TTTCTGGATC	ACTGGCGTTA	TCCTTCTTGC	120
AGTTGGCATT	TGGGGCAAGG	TGAGCCTGGA	GAATTACTTT	TCTCTTTTAA	ATGAGAAGGC	180
CACCAATGTC	CCCTTCGTGC	TCATTGCTAC	TGGTACCGTC	ATTATTCTTT	TGGGCACCTT	240
TGGTTGTTTT	GCTACCTGCC	GAGCTTCTGC	ATGGATGCTA	AAACTGTATG	CAATGTTTCT	300
GACTCTCGTT	TTTTTGCTCG	AACTGGTCGC	TGCCATCGTA	GGATTTGTTT	TCAGACATGA	360
GATTAAGAAC	AGCTTTAAGA	ATAATCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

GAATTCGGCC	TTCATGGCCT	AGGGAGTCTG	AAGCAATTC	TGAAGAAGAC	CAAAAAGAAC	60
CACAAGACGA	TGAATGAAAA	GGCATGGAAG	CGTTGGTGCA	CACAAATCCT	CTCTGCCCTA	120
AGCTACCTGC	ACTCCTGTGA	CCCCCCCATC	ATCCATGGGA	ACCTGACCTG	TGACACCATC	180
TTCATCCAGC	ACAACGGACT	CATCAAGATT	GGCTCTGTGG	CTCCTGACAC	TATCAACAAT	240
CATGTGAAGA	CTTGTCGAGA	AGAGCAGAAG	AATCTACACT	TCTTTGCACC	AGAGTATGGA	300
GAAGTCACTA	ATGTGACAAC	AGCAGTGGAC	ATCTACTCCT	TTGGCATGTG	TGCACTGGAG	360
ATGGCAGTGC	TGGAGATTCA	GGGCAATGGA	GAGTCCTCAT	ATGTGCCACA	GGAAGCCATC	420
AGCAGTGCCA	TCCAGCTTCT	AGAAGACCCA	TTACAGAGGG	AGTTCATTCA	AAAGTGCCTG	480
C						481

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

GAATTCGGCC	AAAGAGGCCT	ACGATTGAAT	TCTAGATCTG	CCCGTCTTGG	CCTCGCAAAG	60
TGCTGGGATT	ACAGGCGTGA	ACCACTGTGC	CTGGCATATT	TGTCTATTAA	TTTGCTTTTC	120
TTTAGATGTA	TTCTAGAGGG	GGGAAAATCA	GTAAGAAGAC	AGTTATGTAA	TTCTAACAAG	180
TTCTCCATGT	GTCTTGCCAT	CTNGCTTTTT	CTCATCCTAT	CAGTACTGGA	TGAGAATGTT	240
TATTTCACTG	AACTTTGCCA	AAGAGTTTCA	ACATTTTTTT	GTTTAAATCAT	AGGAGAAAAA	300
GGTTTATCTT	ATTTTTAAAA	ATTTTTATTT	AATTCCTTCA	TTACAAATGA	AGTCCCAGAA	360
GTGTATTTG	TTCTTTTAGG	CTGTTCTTAA	TGTTTCATTG	GAACAGGCAG	GGTTTGAAGG	420
AGTGGGGATA	CTGGGAAAGC	CAGGGTGATG	AGAAAATAGG	AAAGGGGTCT	TGTCATTGGG	480
AGGCCACTAT	ACCAGTGGCC	CTGTACCAG	GACTAATATG	GTACTTTGAA	GCTTTAAATT	540
CATTTCTTTA	TTCAATAATT	TTAGGCATCC	CAGGATACTC	GAG		583

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```

GAATTCGGCC AAAGAGGCCT AGCTATCCGC TTTGCTATTT TAGTGGCATT ATCAAAATCA    60
CTGGAAGCAC CTGTNGTAAT ATGGTCGGTT CCAAATATAA GCTCCTCTGC CACTCTTCCT    120
CCCATACTAA CATCCATTTG TGCAAGCAGC TGGGCTCTAG TTTCATTCCA TCTGTCATTC    180
TCAGGTAACA GGGACACATG TCCAAGTGTT GGCCCCGTG GCATGATTGT AGCTTTGTTG    240
ATAGGCATTG CATCTTTTGT GTAATATGCA ATAATGGCAT GACCAGATTC ATGATATGCT    300
GTGATGGTTT TGTTTTTGT ATCAATTTCC ACACTTCTTC TTTCAGGCC CATTAGAATT    360
TTGTCTTTGG AAAACTCCAG CTCCTTCATG GTAACCATTT CTTTCCATC AACAGCTGCT    420
TTTAATGCAG CCTGGTTCAC AAGATTCTCC AACTCTGCTC CGGAAAAGCC AACAGTACCT    480
CGAG                                                                    484

```

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```

GAATTCGGCC AAAGAGCCTA ATTGAATTCT AGACCGGCCT CATCGTTCTT TGCCTTCCTG    60
GTCACCATCT GCTACGCTGG AAATACATAT TTCAGTTTAA TAGCATGGAG ATCCAGGACC    120
ATACAGTGAT TTACCATTTT GATAATTAAA AGGAAAAAAA AAGGAAGACT CTCACTGTAA    180
AAACAGCTGT AGGTATAATG TATATTCCCA GAGAATTGTA TTAACTAAT TAATGTTTTT    240
TATATTCTTA AATTGCTCA CAAATTGTGG TTTGTTACAA TTAACTGGA TACTTATTTG    300
CAAAGTGTTG TAGCTTATAA TGAAGTCTTA AGTATCTTAT TAATGTATTA ATGTCCTTCAT    360
AGATCATATT TTCTTAGACA ATGTTTAAAT AGATAAATTG CTAATATTGA GAATGTGTCA    420
AGTTTGTAAG CCTAACTTTT AAGATGCCAG AACTCGAG                                                                    458

```

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```

GAATTCGGCC AAAGAGGCCT ACGGCCAAAG AGGCCTAGGT GGTGATTGAC CTAAGAAAAA    60
AGTGTCTTAA ATATCTGGAT TCTATGGGAC AAAAGGGCCA CAGGATCTGT GAGATTCTCC    120
TTCAGTATTT ACAGGATGAA AGTAAGAACC GCTCGAG                                                                    157

```

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

```

GAATTCGGCC AAAGAGGCCT AGTGGACTGC TACTTCCCTT TAGCACTATA TACAAACATA      60
ACTGCTACTT CCCTTTAGCC CAGGATCAAA ATAATGATTC AGTTAAAAGT TGCTTGCCTA      120
ACAAAATTTT AAAATATGGA CTTCTGTGAA TTGCTAAAAC ACATCCTTTT AACTAGGCAT      180
CTTTAAGTCT ATAGTATCTT TAAAGTTAAT TTCAAAAATT AGCAGAGCCT GGAACACAAA      240
TTATTCAGGA AATAATTCCT GAACCTACCT CTATCTTCAT AAAACGTATT GGGGCAAGAA      300
CTATTCTATT GAATTCTAGA CCTGACTCGA G                                     331

```

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

```

GAATTCGGCC AAAGAGGCCT ACCATCTGTC ACTAATATCA AAGGAGGGCC AAGGACACAG      60
CCCTGGGGGA ACTTACCAGG TCAACCCACA ATGGGTGAAT TTATAGTTTG TTAGTTAGTG      120
GTCAGTTACC AACTTCTCTG TCTGTCTAAT GCTTTGACTA AAATGTCCAG ATTATTTACC      180
TAGTTAACAA AATTAAAGAA GATTCTAAGA CCAGTTTAGC ATCATTTTCT CTGAAGTCCA      240
TAATGAATGT CTGTTAAACT CTCGTCACTC TTATTTAGGT GCTTTTGGGT CATTTGTTGT      300
AGGTTTATTC TCCCAAATCA ATGTCACATA TACGTCTGTA ACTTGTGTTA TCAGCTTCCT      360
TCCTAGGGCT TTAACCTTCT TTCAGTCTTA TAGCATTTCCT TCCATTTTCC TTTCAAGTTCA      420
CTCCAATAAA AGCTCGACAA ACTCCTGGGA GCCCCTTGGT GCTCGAG                                     467

```

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

```

GAATTCGGCC AAAGAGGCCT ACGATTGAAG TCTAGATGCA CACATTCAGC TTCGTCTCA      60
GTCCTGAGAG TGGTTGTGTT TTATGGCTG ATGAGTTATT TCCACATATC ACATGTATAA      120
GGTATTTGAA TGAAGGTGCT TTGTAGTCAT GACACACTAC TCTTTTACTA ATTATTAATA      180
TCTTAAGATT ACAATTTGAG AGGTAGAGAT GGTATTGTTT TTAATGGGTG TGGGGGGTGG      240
TGATGATAGG TATTTTACC CTGGTAAGTG ACCTACTAGG TTTTATTAAG TGTGCAACT      300
TGTCAGTGT GTGGATGGGA TCTCGAG                                     327

```


(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

```

GAATTCGGCC AAAGAGGCCT AGTGGTGGTA TGTATTGAG TTCACAGTAT TTGTTTATA      60
GCAGTTTTCG AAGCACATAC TGTGCCACGG ATTTTCCAC ATTATTTTTA GACAAGGGAA      120
CACAGCCATC AAAACTGATA CCATGGCCGG GCGTGGTGGT GGGTGCCTGT AGTCCCAGCT      180
ACTTGGGAAC TCGGGACATT CTCGAG                                         206

```

(2) INFORMATION FOR SEQ ID NO:74:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```

GAATTCGGCC AAAGAGGCCT CCACCATGCC CGGCCTCAAC GATATTGATT CTTTGGGCTG      60
TAGTCAGTAT TGGATTATGA TCAATATTAT CACCATTAT TTTGTTGCTC CAGTTCTTCC      120
AGCTGTGGCC AATCCTTCAG TTGGATTCTT GTGCCCCATC AACATTCTCC ATCCTTCTCT      180
CGAG                                         184

```

(2) INFORMATION FOR SEQ ID NO:75:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```

GAATTCGGCC AAAGAGGCCG ACTTTATTAT ACCATACATA CTATAGGTAC CTGGGCACAA      60
GATAGGTCAG GGGGTACTGT ACCCTATTT ACATGCTTAA TCACATCATA AGGTTGCAGG      120
TGGTACTTGA AATCATCACT AATGAGACAG CAAATATGTT AGACTTGCTG GCCCAGCAAG      180
CCACAGAAAT AAGGATCACC ATCTATTAGA ATAGACTGGC TTCAAAC TCG AG          232

```

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

GAATTCGGCC	AAAGAGCCTA	CTAAATTC	TTGTTTGTG	TTTTTAATAT	TCCATCGTTG	60
ATAGTTAATA	TTCTTTTNGA	GGTTTGTGTT	TAGACAAAGT	AATGTTTTTC	TGAAATGATT	120
CTAAGACAAT	TGGTCAGAAA	TAGTCTCTGC	TTGTTTGGTT	TATGTTTGGT	CAGTTGTGCT	180
TTGATTATAG	ATGGTTCCTC	ATCTGAGATT	AAAGTGGGAC	AGAACTCAA	AAGTAAAGG	240
GTAAATGTTC	GCTGTGATGC	TTATGTGGCA	CATGTGCTAG	TCCTTGATAG	TGGCGAGAAA	300
GATCTTAATT	GCTCAAAGGA	AGTACTCGAG				330

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

GAATTCGGCC	AAAGAGGCCT	ACAGTGCATT	ATGTTATTTT	GTTATCTCTG	CAGTAACTTT	60
CTATCATGTT	ATTTATTTTC	TTTGTCTTAT	TTAAAGCTTC	TGAGATTATG	GATTTTGTGTT	120
TCCTTCCCTG	AAGTTAAGTG	TTATCATTCC	TATATAGTAC	TAAGCTGTCT	ACAGAATAGT	180
GGGAGTCTGC	CCTCTTGAGT	TGGGAAGATC	CTAGTTTGAA	TCTTGGCTGT	GGGACTTTAA	240
AGTTCATTAA	CTTCTCTTAG	CCTCAGTCAC	CTGAACCTCG	CAGTGGGGAT	CCTTATGCCT	300
CAGAGTGTCA	TTGGGAGGAC	TCACGAAAAT	ACGCTTGTAC	TTTGAGTTCA	GTACCTAGCC	360
TGTATGAGCC	AGCATTAAAG	GGGACAGTCA	TCACGCAGCG	CTTTGCACAC	AGCTCTCACG	420
CCACATCCTT	TGGCTACTGT	TTTGGTAAAT	CTTTACTAGT	AAATGTTTCT	TAAAAGCATT	480
TACATTCATG	GACATGATTC	CCTCGAG				507

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

GAATTCGGCC	AAAGAGGCCT	AGATTGAATC	TAACCTTTTT	GCCTCTTCCC	AAGTAGCCTA	60
TTTGAGCTAG	AACAAAACCT	TGTTAGCCAT	TTTGGGAGAG	AATAGGGAAT	CTAGAGAATG	120
AAGATCTGCC	CGACCTGCCT	CGAG				144

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

GAATTCGGCC AAAGAGGCCT AACGACGGTA ATCAAGTTTT GCTCCAGAAG CATCAAGAAA	60
CTTAGCTACT GCTTCCAAAT CAGTACCGGT TTCAGTTAAG CCTTGAATAA TACAGTCTTG	120
AAACTGAGTA GGGTCAAACC TCTCTTTTC ATCTCTTTT CTAGTTTAA AACGCTGGCC	180
TGATAGCGTT GGCTTTTGCT GCTTTTGATT ATTCATAAAA GACACCCGAA TTTAAGGCGA	240
AGAGGAAAGA GCCAGAAATC CCCGATGTAC CGGCAACTGC GGCCTATCT CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:80:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 119 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

GAATTCGGCC AAAGAGGCCT AGACTGCTGG TGGTGAAGT CTTTCTTGT AGGTTGTGAG	60
GGCTGAAAAA GCCAATCTTA ATAGACATGA GGCTCATGTT TGCACAGTGT GCTCTCGAG	119

(2) INFORMATION FOR SEQ ID NO:81:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 323 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

GAATTCGGCC AAAGAGGCCT ACTCAGCTGC AAAAAAGCAT ATTTTCTGTG TTTCTGGA	60
GCACGTGNGT CCTTGCCCTC ACATAGACAC TCAGACACCC TCACAAACAC AGTAGTCTAT	120
AGTTAGGATT AAAATAGGAT CTGAACATTC AAAAGAAAGC TTTGGAAAAA AAGAGCTGGC	180
TGGCCTAAAA ACCTAAATAT ATGATGAAGA TTGTAGGACT GTCTTCCCAA GCCCATGTT	240
CATGGTGGGG CAATGGTTAT TTGGTTATTT TACTCAATTG GTTACTCTCA TTTGAAATGA	300
GGGAGGGACA TACAGAACTC GAG	323

(2) INFORMATION FOR SEQ ID NO:82:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

GAATTCGGCC AAAGAGGCCT AGGCAAATCA GAACTCTTAA GTTGTTTCAT CCTATTTTA	60
TTCTTAAAAT AAAGAAATTC ATTTCAAATA CGGATTAATT TTTTCTCTGG GAAAAAACAC	120
ACTGTAAAAC ATAATTTTCT ACCTTTTAAA ACGTTTTACA ATTTATCCCA TCTTCTAACA	180
AGTTATGATA CTCATACCTG CCGAGGTTTC TCTAAATTG TCGCTGGTCT TCTTTTCTCT	240

CCATTTCCAA	GGCTTAAAGA	TTTTACCAAT	GGTGGATAGT	TTCCCTTTTC	TTTTGAAGGG	300
AGGTGTTTGG	GAACCTGCTG	TGGGGCCATC	TGAGTTTGCT	ATAGAAGCTT	TGTCCAGTCC	360
GTCAACTGAG	CCGGAGATGT	GGACCCGGAG	CGGGCGGCCC	CTGCTCGAG		409

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

GAATTCGGCC	AAAGAGGCCT	ATAAATATAT	AATTGACTTA	TTTATTAAAT	TTAGGAGAAA	60
AAAAAAGTTT	TCCTTGACAT	TCAGCTCTAT	TGGATTATT	TCCATTAAAT	TGCATCATGT	120
GTTATGTCTT	GGTAAACACT	CCATTTCCTG	TCTTGGTGGG	CATCCTGTCT	GTGTACCTGT	180
GCAGTACACT	TTAATCATCA	AGACTTCAAA	GTGCTTTTGA	GCTATCAAAT	CTTGGGAGAG	240
TCCCATCTAG	CATCTTAATA	ATTATTTTTC	CAAGTTCGTT	ATAATTAACT	CCTTTAACCT	300
CATCTCATT	AATCAATTTT	GTATTATCAT	TCTGTTGTTC	TCTGGAAAGC	AGCCAATTGT	360
TCAGCTCTTG	AATCAGAAAT	TTCAAAGACT	CACCTCTCTT	ACCTGGGCTT	GCACATATTT	420
GTCTAAGTA	ATTCTCTATC	CCTTAAACCT	CTGAGCCCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:84:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC	AAAGAGGCCT	AATTTTGTAA	AAAGGAATAT	CATTCTTTGA	TTTTAGATCT	60
TAGACATCAG	GCACTGACAT	AGAGCTTAGA	TATGTTCTTA	AGGTAGCTAA	GCCATTTATT	120
ATAGGATAGT	CAGATAGGAT	AGTTCTAGGA	TTTATAGACC	TTTTCAGATA	CTCTTTATCC	180
AGTGAGAGAT	GACCTATTTT	TATTAAACT	TGGGTTTGGT	ATCTTGGAAT	TGGCTTGAAA	240
ATGATTGTGTT	TTTACATTGG	ATGTGAACGG	AAAGTTTGTA	TCTCAAATGT	TTTACCACCT	300
GAAGGGACAG	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GTGGACATGG	AAGTAGGTGA	GTTTGGGGGA	CCTATGAAGA	AAAAAAGAGC	CTTTCCTACTG	60
GGCAGTGAAG	TGTGTACACA	CACACTGGGG	GCAGAGCAGT	GTGAAAACAT	TCTGCACCAG	120
CACACAAATG	ACTTTTGCCA	AATCATCTNC	CTGATCTGTC	GGATGTTACG	TCTCTGCAGA	180

ATCTGGAGAA	AACCAGAAAA	CCCAGCTTGT	TTGCCCTCAT	TTTGGCAGTT	TAATTTAGGA	240
ATCACACTGG	CTTTACATAA	ACTCTTTACC	AAAAAACTG	TATTCTGTAT	TTGGAAGGCA	300
CAAGTTAACA	TGGGCCCAAG	GGAAGGAAGC	ATTGTATACA	ATTACATAAT	AGCTACTCTA	360
TTACTTTAAA	ACCTAATGGC	AGCCTCGGGC	AGAAAAGTCA	AAAGGGGAGA	GAAACCATTT	420
CTGTGAAATT	ATCTGATGCA	ATCATCTCTT	TGGAGACATT	GTCAGTTGAC	AATGGTTCTG	480
CTTTTCTCT	CGAG					494

(2) INFORMATION FOR SEQ ID NO:86:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTCGGCC	AAAGAGGCCT	ACGGGAGCAG	TTCATGCAGC	ACCTCTACCC	ACAGAGAAAA	60
CCTCTTGTGT	TGGAAGGGAT	TGATTGGGG	CCATGTACAA	GCAAATGGAC	AGTGGATTAC	120
CTAAGCCAAG	TTGGAGGGAA	GAAAGAAGTA	AAGATTCATG	TTGCTGCAGT	TGCACAGATG	180
GACTTCATTA	AACTTTACCT	TTTGACCAGT	TGGTCCAGAG	GGCAGCTGAA	GAGAAACATA	240
AAGAATTCTT	TGTTTCAGAG	GATGAGAAAT	ACTACTTACG	GTCACTTGGA	GAAGACCCTA	300
GAAAGGATGT	TGCAGATATC	AGAAAGCAGT	TTCTTTGTT	GAAAGGAGAT	ATTAAGTTTC	360
CAGAATTCTT	CAAAGAGGAA	CAGTTCTTTT	CCAGTGTTTT	TCGAATTAGT	TCACCAGGAT	420
TACAACATG	GACTCATTAT	GATGTAATGG	ATAATTTGTT	AATACAAGTG	ACAGGAAAAA	480
AGCGTGTGT	ACTCTTCAGT	CCTCGAG				507

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

GAATTCGGCC	AAAGAGGCCT	AGCTTATCCA	GTCTAGTAAT	TTTTTTTGTA	TGTGTGCACA	60
GCACAAATAG	TTACAATAGT	TCCCTTTTTT	GACATCAAAT	TCAACAATAC	CTGGCATATA	120
ATTGCTAAAT	ACTGTCATCA	TTTTCATTAT	CATTATCCCC	CACATAGTCA	TAAATAAGCA	180
CACATGCTAA	TCTTCAACTC	TTCTTCTATT	ATTTGCTGCC	TTCTTACCTG	CGTTAGTGAG	240
AAAGTGCCTT	CAAATAGATT	GCCAACAGTT	ATATGGCTCG	AG		282

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```

GAATTCGGCC AAAGAGGCCT AGTGCAGTAT TCACGTGTAA CTTTAAAGTT TTCAGTACAG      60
TGCTTTTATA CCTTTAATGC AATGTTGTAT TCATTGGGT ACTATTGTGT AGTATTTAGG      120
ATGTATGCAT GTTTGTTTAT ATGTAAGCTT GGTGGTGCT TTCGCTTTTG TGCTACCTTT      180
CTTGGATTTT TGTACCAGAG ATGTGCTAAA CTGATGAAAT ACATTGAGAA AGTTTCCATC      240
TTATTCTTTT ATATGGGACT GATGATGTGT GTTGGGGTAG ACTGCTCCTG CAGAGTTTGG      300
AAGAAAGTAC CAGCAAAGCC GGCCAATCTC GAG                                     333

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(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```

GAATTCGGCC AAAGAGGCCT AGGTTTCTAG ACTGGAAGAA CAAATGAATG GCTTAAAAAC      60
ATCAAATGAA CATCTTCAAA AGCATGTGGA GGATCTGTTG ACCAAATTAA AAGAGGCCAA      120
GGAACAACAG GCCAGTATGG AAGAGAAATT CCACAATGAA TTAAATGCCC ACATAAAACT      180
TTCTAATTG TACAAGAGTG CCGCTGATGA CTCAGAAGCA AAGAGCAATG AACTAACCCG      240
GGCAGTAGAG GAACTACACA AACTTTTGAA GGAAGACAAG GAACGCNAGA AAAAAGACGA      300
AGAAAAGGTG AAGGCAGAGG AAGAATCAAA GAAAAAAGAA GAGGAAGAAA AAAAGAAACA      360
TCAAGAGGAA GAGAGAAAGA AGCAACTCGA G                                     391

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(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

```

GAATTCGGCC AAAGAGGCCT AGCTTCTCTG CTTTATTTAT TCATTTATTT TTAATTTTTT      60
GAGATGAAGT CTCGCTCTGT CATCCAGGCT GGAGTGTGGT AGCGCCATCT CAGCTCACTG      120
CAACTTCCAC CTCACAGGTT CAAGTGCAAT GTCTTTTAA TGTCTATGTG AAGGATTCTG      180
AGCTGTACGA GTTCTGCCCC AAATCTGCAC TTGGGCCTCA GGATCAGGCC GCCTCCCCAT      240
CAATCTGGTG GATGCCAGTT ATAACCTTTG CCTGCACCC CATCCACACT GTAGTTCAGA      300
GAAATCAAC AGTCAGCAAT CATATCACA GCACTCGAG                                     339

```

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

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GAATTCGGCC AAAGAGGCCT ACGAGTCAGC ATCTAGACTC AGCTCCTTCT TCCGCGCTGC      60

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CCTCACACAT GCGTGCAATC ACTCTCCTGT CCAGGCTCAT GTCCTTGTGC CCGCTTGCTG	120
CTTTGCCTCC TTGCTTGTTT CTGACTTGCT CACCCACTCT CTGTCATTGT CTTGCTTACT	180
CAGGCTCACC CTATCAACTC GAG	203

(2) INFORMATION FOR SEQ ID NO:92:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 127 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

GAATTCGGCC AAAGAGGCCT AGTTGAATTA TTGCCACATG TTAGGAATGT GGAAGGTTGC	60
TTGGATAAAT GAGAAAAGAA AGAAAAGAAT GCAAGTAATG TCCTGCTGGG GTAGTGCAGT	120
CCTCGAG	127

(2) INFORMATION FOR SEQ ID NO:93:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 179 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

GAATTCGGCC AAAGAGGCCT AGATCCACG AATTTAGGCT CAGAAGCATC GCTCCTCTCC	60
AGCCCTGCAG CTATTCACCA ATATCAGTCC TCGCGGCTCT CCAGGGCTCC CTGCCCTGAC	120
CTCTCCCTG GGTTTTCTGC CCCAGCTCC TCCTTCCCC CCCCCCTATA TCCCTCGAG	179

(2) INFORMATION FOR SEQ ID NO:94:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 326 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

GAATTCGGCC AAAGAGGCCT ACTGGAATCA CTAACTTTG TCTCATTTT TTTCTCTTC	60
ATCAAATATC AATTTTGGAT TCAGATCCAG TTTTCTTCT TCAATTATTT CTGCCCTTTA	120
AAATAATACT ACCTCCTTCC TCCACAATT CATTTCAGCT TGTTTATGTT CCTTGGGTTT	180
TATATTTTTT CTTCTAGTA TTACAATATA TGCACAAATA TTAGGTTATA AACTTCCAA	240
TACAACTTTT ACTGCCACTC ACAGGTTTTT CAATTGTTT CATTTTCATG TACATTTAAA	300
TAATGTATAT ATTAGGATA CTCGAG	326

(2) INFORMATION FOR SEQ ID NO:95:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

```

GAATTCGGCC AAAGAGGCCT AAATATGAAA AGCTGTCTAT ATCTACCCAG CCAAACCATC      60
TCCAGCTTTT ACTTTTATTG AGCAAGTATA CGTTATTTAT TTAGTCATCC ATTCATTCAT      120
TTACTCATTT ATTTATTTT TTTTCAGCTT ATTTCTGCTT TCATCTTAAT TCCTCTCTTA      180
AACTTTTGGG TATCACATTG GTTCTCCCTG ACCTCCACCA CTGTAACCTG ACTTAAGTTA      240
AATGTTTAAT TTATTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT      300
TTTAGGTAGA GAAGATGTCT CACCATGCTG CCCACTCGAG                               340

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(2) INFORMATION FOR SEQ ID NO:96:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 240 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

```

GAATTCGGCC AAAGAGGCCT ACTTCTTCC TTATTCTACT TCTCTTTTT TCTTTTGTTT      60
AACATCATGT TTGTGAAAGT TTCATGCATA TCGTTGCAAG TATTTGTATT TCATTCATTT      120
CTATTGTTGT ATAATGTTAC ATTGCATGAA TATGCAGCAA TTTGTTCTAC TGTA AAAAGC      180
AATAAGGATT TAGTTATTT CAGGTTGGAC ACAAATAATT TTGCTATGAA GGGTCTCGAG      240

```

(2) INFORMATION FOR SEQ ID NO:97:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

```

GAATTCGGCC AAAGAGGCCT ATA ACTATAT AGCCTAGAAT TTTTCCTATT CTGTTATTAA      60
GCCTCTATCA CTATTCTTTG ATTCTAGGTT TTATAATCCA TTCTTTTTTA TAACAACCTG      120
TTCTTGTTTT ACTTTTCCCT ATTTTGTGTT TATACCCATC TATTCTTTTT TAGGATCTAT      180
TCTCCACTTT TAACTTTGAG GATTCTAAAA TACTTACTTT AAAGTTATTT TTAAGTTGTT      240
CTATTTTGTG TTTTGTGAGG AGCGAATTG CCTTTTTTAT TTGGCTGTTT TACCATGCTT      300
TTTGAATTTT TGTTTTGTAG GCTTCTCGAG                               330

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(2) INFORMATION FOR SEQ ID NO:98:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 279 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

GAATTCGGCC	TTCATGGCCT	ACTCTACTCC	AAGTAGGAAA	AGGCCAGGAG	GTCTGTGTTAA	60
AGGATGCACT	CAGAGCCCGG	GCTCCCTAAC	GTATGAGAGT	GCTAACCAGC	AGGTGTAGAC	120
TTTTCAGGAG	TGAAGAATGA	GGCAGGCATT	CCAAACCTGG	ACCTTCATCA	CCTTTTGTTC	180
CATCTCAAGA	CAATTCTGAG	GGACTGTTTT	GGAGCGTGTC	TGGAAGGTGA	ACGTTGAAGA	240
AGAGTGTGGG	CTTGATGTG	ACTCAGTTGA	ATACTCGAG			279

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

GAATTCTCAT	GAAACTCTCA	GCGGAAAGCT	ACAAGGAAAC	ACAGATGGTG	AAGATTAAAG	60
AGGAACCCAT	GGAGGTTGAC	ATCCAGGACT	CCCATGTCTC	GATATCACCC	AGCCGGAATG	120
TTGGCTACAG	CACTTTAATC	GGGCGAGAGA	AAACCGAACC	CTTACAGAAG	ATGCCAGAGG	180
GCAGAGTACC	CCCAGAGAGA	AACCTCTTCA	GTCAGGATAT	CTCTGTGAAA	ATGGCTTCCG	240
AGTCCTCTT	TCAACTGTCA	GAAAAAGTGA	GCAAAGAGCA	CAATCATACA	AAAGAAAACA	300
CCATCCGGAC	CAATCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

GAATTCGGCC	TTCATGGCCT	AGAGCAACAT	AGTGAGACCT	CATCTCTACA	AAAAATAAAG	60
AGAAAATTAG	TTGGGGGTGG	TGGCGTGAC	CTATAGTCCC	AGCTACTCAG	GAGGTTGAGG	120
TGGGAGGATC	ACTTGAGCCC	AGGAGTTTGA	GGCTGCAGTG	AGCTGTGGTC	ATGCCACTGC	180
ACTCTAGCCT	GAGTGACAGA	GCAAGATCCT	GTCTCAAAAA	ATAAAGTAAA	ATAAAATAAT	240
CAGTCAACAA	CAGTGATTGG	TCTTCAAGCT	GCCCTCCTCT	TCGGCTCTCA	AGGCAGTTTG	300
TGAAGTGTCT	AGGATAGGAA	TTTCCAGAA	GGGCTTGCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

GGAAGATGTG	CCAAAGTTCA	GAAAACATAA	TCTTATCTGA	TCAGATTAAA	GATCACAACT	60
CCAGTGAAGC	CAGATTTTCT	TCAAAGAATA	TTAAGGATTT	GCGATTAGCA	TCAGATAATG	120
TAAGCATTGA	TCAGTTTTTG	AGAAAAAGAC	ATGAACCTGA	ATCTGTTAGT	TCTGATGTTA	180
GCGAGCAAGG	CAGTATTCAT	TTGGAACTTC	TGACTCCATC	CGAGGTACTT	GAGTATGAAG	240
CCACAGAGAT	TCTTCAGAAA	GGTAGTGGTG	ATCCTTCAGC	CAAGACTGAT	GAAGTAGTGT	300
CTGATCAAAC	AGATGACATT	CCTGGAGGAA	ATAACCCNA	CACTCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

GAATTCGGCC	TTCATGGCCT	ACTGCGGTC	TGTTAGTAGT	ATAGTGATGC	CAGCAGCTAG	60
GACTGGGAGA	GATAGGAGAA	GTAGGACTGC	TGTGATTAGG	ACGGATCAGA	CGAAGAGGGG	120
CGTTTGGTAT	TGGGTTATGG	CAGGGGGTTT	TATATTGATA	ATTGTTGTGA	TGAAATTGAT	180
GGCCCCAAG	ATAGAGGAGA	CACCTGCTAG	GTGTAAGGAG	AAGATGGTTA	GGTCTACGGA	240
GGCTCCAGGG	TGGGATGAGC	GGGCCAAGAT	CGATGATCCC	ACAGACTCCA	AGCCTGAGGA	300
CTGGGACAAG	CCCGAGCATA	TCCCTGACCC	TGATGCTAAG	AAGCCCGAGG	ACTGGGATGA	360
AGAGATGGAC	GGAGAGTGGG	AACCCCACT	GATTCAGAAC	CCTGAGTACA	AGGGTGAGTG	420
GAAGCCCCGG	CAGCGTCTCG	AG				442

(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

GAATTCGGCC	TTCATGGCCT	ACAGAAAGTA	AGTTGGAACC	ATGTAAGAAA	AAAAGACACA	60
AATAAACTA	GGAAAGTGGC	ATGGAGCTAG	GCGTGAAGTT	GCTGCTCAGT	TTACATGTAT	120
GAAGTTCTGT	GTGGACTTAA	GCTCCTACTT	CAGTCATTTA	TTGTATGACT	TGGACAAGTT	180
GCCAAACATC	TCTAATATTC	ATTCATATTT	GTAGGGTAAA	AGGATGAGTA	ATATGTATCT	240
TTAGTGATA	AAACATTAC	AGACAACTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

GAATTCGGCC	TTCATGGCCT	AAGACACCAG	CGAGCCCAGG	CAGGTAATGG	AAGCAACTGT	60
AGCTGACTGG	ACCTAAGAAG	CAGTGGCAGG	GGTGGCCAGG	ACCCAGCTG	ACCTGCCTTG	120
GTGCTCAGAG	CAGCAGGGCT	GGCCATGGTC	AGGGAGTCTG	GGGAGGTCAT	GCTCTGTCCA	180
CAGGGTTCTA	GCCAGCTTCT	GCCAAATTGT	CTGTTTTTTC	TCAAGAGAAG	CTGGGAAGGC	240
CAGTTGTGGT	GTCTCATACC	TGCAATCATA	GCACTATGGG	AGGACTCGAG		290

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

GAATTCGGCC	TTCATGGCCT	ATGAAAATT	GGAAGAAGAA	TCCAATGAAA	GTGGTAGCCC	60
TTTTGACCCT	GTTTTGAAG	TTGAACCTAA	TCTCTAACGA	TAACCCAGAG	GAACATGTAC	120
TGAAGGTAAT	TCCTGAGGAT	GCTTCAGAAT	CTGAGGAGAA	GCTAGACCAA	AAAGAGGATG	180
GTTCAAATA	CGAAACTATT	CATTGACTG	AGGAACCAAC	CAAACTAATG	CACAATGCAT	240
CTGATAGTGA	GGTTGACCAA	GACGATGTTG	TTGAGTGGAA	AGACGGTGCT	TCTCCATCTG	300
AGAGTGGGCC	TGGATCCCAA	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GAATTCGGCC	TTCATGGCCT	ATGGCAATGG	TGGTCGTGGT	GCTGGGTGGG	ATGNGGTCTT	60
CATCCTCTTC	CTCCAGGAAG	GATGCCTCTG	GGATATGGCT	GAAGGCCTCT	GGGTGCAGCC	120
TGGCCAGTTT	CCCTTTCAGC	GTCCTGATAC	GGCGGAAGAT	GATGTCCAGG	TCCCGTTTCA	180
TCTCTACTAG	GGTCTCTCGT	TGGTGCAGGA	AGCGTTCGCT	CATCTGCTGC	AGGCGGGCAT	240
TGGACAGGTT	GTTGAAGTTG	AGCAGCATCT	CATTGGTCTT	CTCAAAGCGG	TCCAGCATGT	300
TCTTCTGGGA	CAGGATGATG	GCGTTGACAT	CATCTGTGTT	CACCATGCTC	AGGATGCGGC	360
CGCAGAAGAC	CCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 601 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

GAATTCGGCC	TTCATGGCCT	ACATGACACC	ACCTGAACGT	CTCTTCTCTC	CAAGGGTGTG	60
TGGCACCACC	CTACACCTCC	TCCTTCTGGG	GCTGCTGCTG	GTTCTGCTGC	CTGGGGCCCA	120

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GGGGCTCCCT GGTGTTGGCC TCACACCTTC AGCTGCCCGAG ACTGCCCCGTC AGCACCCCAA      180
GATGCATCTT GCCCAGCA ACCTCAAACC TGCTGCTCAC CTCATTGGAG ACCCCAGCAA      240
GCAGAACTCA CTGCTCTGGA GAGCAAACAC GGACCGTGCC TTCCTCCAGG ATGGTTTCTC      300
CTTGAGCAAC AATTCTCTCC TGGTCCCCAC CAGTGGCATC TACTTCGTCT ACTCCCAGGT      360
GGTCTTCTCT GGGAAAGCCT ACTCTCCCAA GGCCACCTCC TCCCCACTCT ACCTGGCCCA      420
TGAGGTCCAG CTCTTCTCCT CCCAGTACCC GTTCATGTG CCTCTCCTCA GCTCCCAGAA      480
GATGGTGTAT CCAGGGCTGC AGGAACCTG GCTGCACTCG ATGTACCACG GGGCTGCGTT      540
CCAGCTCACC CAGGGAGACC AGCTATCCAC CCACACAGAT GGCATCCCCC ACGCACTCGA      600
G                                                                                   601

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(2) INFORMATION FOR SEQ ID NO:108:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 101 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

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GAATTCGGCC TTCATGGCCT ATTTTTTTT TTTTATCAA AAGTTGTTT TATTTTCAAT      60
ACAAGATAAA TACCATGCTT GTTACTAGTG CAGTTCTCGA G                                                                 101

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(2) INFORMATION FOR SEQ ID NO:109:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 512 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC TTCATGGCCT ACAGAATTGG AGGCATGATG AAGACTCTGC TGCTGTTTGT      60
GGGGCTGCTG CTGACCTGGG AGAGTGGGCA GGTCCTGGGG GACCAGACGG TCTCAGACAA      120
TGAGCTCCAG GAAATGTCCA ATCAGGGAAG TAAGTACGTC AATAAGGAAA TTCAAATGC      180
TGTCACCGGG GTGAAACAGA TAAAGACTCT CATAGAAAAA ACAAACGAAG AGCGCAAGAC      240
ACTGCTCAGC AACCTAGAAG AAGCCAAGAA GAAGAAAGAG GATGCCCTAA ATGAGACCAG      300
GGAATCAGAG ACAAAGCTGA AGGAGCTCCC AGGAGTGTGC AATGAGACCA TGATGGCCCT      360
CTGGGAAGAG TGTAAGCCCT GCCTGAAACA GACCTGCATG AAGTTCTACG CACGCGTCTG      420
CAGAAGTGGC TCAGGCCTGG TTGGCCGCCA GCTTGAGGAG TTCCTGAACC AGAGCTCGCC      480
CTTCTACTTC TGGATGAATG GTGACACTCG AG                                                                                   512

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(2) INFORMATION FOR SEQ ID NO:110:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 485 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

GAATTCGGCC	TTCATGGCCT	AAATTATTAA	AGGTGACAGT	ACACAGGAAA	CATTACAATT	60
GAACAATGCC	TCAGCTATAC	ATTTACATCA	GATTATTGGG	TGCCTATTTG	TTCATCATT	120
CTCGTGTTCA	AGGACAGAAT	CTGGATAGTA	TGCTTCATGG	CACTGGGATG	AAATCAGACT	180
CCGACCAGAA	AAAGTCAGAA	AATGGAGTAA	CCTTAGCACC	AGAGGATACC	TTGCCTTTT	240
TAAAGTGCTA	TTGCTCAGGG	CACTGTCCAG	ATGATGCTAT	TAATAACACA	TGCATAACTA	300
ATGGACATTG	CTTTGCCATC	ATAGAAGAAG	ATGACCAGGG	AGAAACCACA	TTAGCTTCAG	360
GGTGTATGAA	ATATGAAGGA	TCTGATTTTC	AGTGCAAAGA	TTCTCCAAAA	GCCCAGCTAC	420
GCCGGACAAT	AGAATGTTGT	CGGACCAATT	TATGTAACCA	GTATTTGCAA	CCCACACCGC	480
TCGAG						485

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

GAATTCGGCC	TTCATGGCCT	ACACACATTG	TGAGCTGTAT	ACGTTAACCC	AAAGTCTGCA	60
TTCAAAGTGG	AATTATAACT	GGGCAGTGAA	TGAGTTGCTC	AGTCCATCTA	TTAACCATAC	120
TCTTTTAGGC	TTTTTATTGC	CTCTAATTGT	TGTAATAATT	AACATTTTCC	CAGGAAGTTG	180
TTTTACAGAA	GAAGGGGCCT	TAGCGGCTTT	CAACTCTTTA	GAGATAAGTT	CAACTTTGTG	240
GATTGACCAC	AGCACATCTT	GTTTAGTAGT	GAGCGGGAGC	CATATGAATC	CTCTAGAGAC	300
ACAGCCGTGT	CTGAGATGGA	CATTGCCAAC	ACAGCTCGAG			340

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

TTCGGNCCTC	ATGGCCTACT	CTCATAAAA	TATTCAAAGA	TCAACCCCAA	ACGTGCCTGC	60
ANTTTGGACA	ATGTNAGCTA	AAGCTATAAA	TGGAACAGCA	GTGGTCATGG	ATGATAAAGA	120
TCAATTATTT	CACCCAATTC	CAGAGTCTGA	TGTGAATGCT	ACACAGGGAG	AAAATCAGCC	180
AGATCTAGAG	GATCTGAAGA	TCAAAATAAT	GCTGGGAATC	TCGTTGANGA	CCCTCCTCCT	240
CTTTGTGGTC	CNTCTTGGCA	TTCTGTAGTG	CTACACTGTA	CAAACTGAGG	CATCTGAGTT	300
ATAAAAGTTG	TGAGAGTCAG	TACTCTGTCA	ACCCAGAGCT	GGCCACGATG	TCTTACTTTC	360
ATCCATCAGA	AGGTGTTTCA	GATACATCCT	TTTCCAAGAG	TGCAGAGAGC	AGCACATTTT	420
TGGGTACCAC	TTCTTCAGAT	ATGAGAAGAT	CAGGCACAAG	AACATCAGAA	TCTAAGATAA	480
TGACGGATAT	CATTTCCATA	GGCTCAGATA	ATGAGATGCA	TGAAACACTC	GAG	533

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

GAATTCGGCC	AAAGAGGCCT	AGAAAATAGA	AAATCAGGTA	GCTATGTCAT	TTTATAAGCA	60
TCAGTCCTCA	CCAGATTTGT	CAAGTGAAGA	AGTGAAACA	GAAAAGGAAA	TTAAAAGGAA	120
AGCTGAAGTT	AAGAAAACCA	AAGCAGGAAA	CACCAAAGAA	GCAGTGGTTC	ACCTGAGAAA	180
GAGCACAAGA	AACACAAGTA	ATATTCCAGT	GATTTTGGAA	CCTGAAACTG	AAGAAAGTGA	240
AACAGAAAAG	GAAATTAAAA	GGAAAGCTGA	AGTTAAGAAA	ACCAAAGCAG	GAAACACCAA	300
AGAAGCAGTG	GTTCACCTGA	GAAAGAGCAC	AAGAAACACC	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

GAATTCGGCC	AAAGAGGCCT	AGGCAGGTAT	TCTTTGCTTT	GGGAAATTCT	TCTTTCTGTC	60
CTCCCTTCCC	TCACTTTTTC	CAAATTCTGG	GCACAACAGC	AGCTCTCTCT	CTTCTGTGGC	120
AGGTGTGCAT	CCTATTGGCT	GGCTGGTATT	TCTTGTTTTT	TTTCCCCCTT	ATTCTTTTTA	180
AATGGGGGTG	GGGGTATAAA	AATATGTGTA	TGGGGTACAT	GCAATAATGT	TGTAATGTTT	240
CTGTGTGTTT	AATGGATAAT	TAATTGCAAA	ATAATTGTTT	TAAITATAAC	ATGTTTGAGT	300
AAATGCTAAA	TTAGTATTTT	TTTCTAATAT	AATAATGAAT	TTGAAATCTA	GCATTCTCTG	360
AACAATGTGT	CTATGTTTGT	CTGTCTGTGT	CTGTCTAATA	GTAATTAATA	TCTGTGGTCC	420
GCACCCACTC	GAG					433

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

GAATTCGGCC	AAAGAGGCCT	AAGCAAAGCT	TAGCTTACGG	GGAAAAA	AAAAA	60
AAGTAGAGCT	TNCCTTGAAT	CTGGAGAAAT	TAAGCACACA	GGTGTCTGTC	AATATTAGTT	120
AAGAGACTAC	TGCACCCATC	ATACTGTAGC	TTAAGACAGT	TTCTTCTTTT	AGTTTTTTCT	180
AAAATGTCTC	CATGTCTGTG	TTATGCCACA	AATAACACAG	CCTTGGTTAA	CTTTTGGACT	240
AAAAAAATC	AACATTATTG	CCAAGCATGG	TGGCTTACAC	CTATGATTGT	AGCACTTTGG	300
ATAGGTCTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

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GAATTCGGCC AAAGAGGCCT AATTTTCCTA ACTGTGTGCT GCCTTTTGGG TTAATTAGAA      60
TTGTAGCATT TCGTTTTGAT TATTTTITG GCTCTTAGC TGTTCTCTCA CATTITTTAA      120
AATGGTAACT CTAGGGATTA TAATATGCAT CTTTAATTTA TCAAAGTCTG TTTTACTAC      180
TTCGTGTAAA ATAAACGAAC CTTGCATTTA TAGTTACATT TATTCCTCTC ATCTCGAG      238

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(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

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GAATTCGGCC AAAGAGGCCT ACTCAAAAGT AGATGAGCAA TTGGTCAGAA TTGTTAGAGG      60
ATATTATTTG AGCTAAATGT TTCCTCTCTC TGTTCAGTG GTGTATGTGC AAGTGTGTGT      120
ATATGTTTTT TGTGGGGAC AGTTTCAGGT AGATGGTATG AAGAGGCAGC AGGAGACTCT      180
CGAG                                          184

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(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

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GAATTCGGCC TTCATGGCCT AATTTTCTAA AACCTGGAGA CAAACCACAT AAATACAAA      60
CAAGTCTGCT TCTTCAAAT TCTGCTGGTG AGAACTCAGA TATCAGTGAT CTTATTAGCT      120
TTTTCAAAAG CCAGAACATA ATGGTGACGA TGATTAATGA CAGTGACTAT GTATCCGTGG      180
CTCCCCATAG TCGGGCTTTA AATGTGATGC ATTCAGAAAA GGAATATGTT TTTGCAGCTG      240
TTTTCAACAG TACTATGGTT TATTCTTTAC CTATATTAGT GAATATCATT AGTAACTACT      300
ATCTTTATCA TTAAATGTG ACTGAAACCA TCCAGCTCGA G                               341

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(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

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GAATTATGCT GTGCTGTTTT CCTGGACACT CAGAATCAAA CAGGCCTTCC ACCCCATCCC      60
ATCATGTTGA ATTACAAAGT ATTTTGAGCA TCGTTTGGTT TGTTCCTTC CACCCATACC      120
TGTGTAGGGC AGCGGTAGCA GTCTTCAACA ATGCATCCTC TTGGACAATG CATTGTAATA      180

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TCTCTCTTTC AAATTCTGTT TCACATAGTC ATTTCTCATG TTCTGTTGGA GACCCCCAAA 240
 AAATTCATTC CACACTGTCA TCCCTTTGTC CTAACCAGAA TCTCGAG 287

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

GAATTCGGCC TTCATGGCCT AATGTATGGT AGACAATTTT TTTTAAAGAC ACAGAGATAA 60
 ACGTTTTCCT GCTTGGTTA CCTTCCTTT CCCCTTTAAA AGGAATTAGC TATAGAACTG 120
 CTTTGTAAG ATGCTTCTTG ATATTTTACT TTGTTTCCTT TTCCTAATC ATTCCCTTTT 180
 CACCCCACTC CTCGAG 196

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

GAATTCGGCC TTCATGGCCT AGTGATTGGG TGCAGAGGAA ACAGGAACCA GAGAAGGGTC 60
 ATCTCAGCTG CCTGTCCAC TCCCTATGCT TGGTGTACC TGCGCCATAG TCTCGAG 117

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

GAATTCGGCC TTCATGGCCT AGTAAGTGCT CTGAGTATAT TAGGAAAAGG AAATCTTATA 60
 CATAAAAATC AAAGCTGTTG CTAATTTTTC CACTAGTGAG TCAGTCTATT AACATTACTC 120
 ATGGTAGGTT TTGCCATACA GAATTTTAAT TTTTATATAT TATTTTGGC TTTGTATTAT 180
 TGCTTAGAAG TCCATGGGGA CCCAAAGATC AGAAAAGATT CATCTGTACT CGAG 234

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

GAATTCGGCC TTCATGGCCT ACGGAACGAA CATTGGCTCG GCGGTGGTGA TGCTAATTCC	60
CACTGTCATG TTCACAGTGA TGGCCGTCTT TTCCTTCATC GCCCTCAGCA TGGTTCATAA	120
ATTTTACCGG GGAAGTGGGG GGAGTTTCAG CAAAGCTCAG GAGGAGTGA CCACAGGGGC	180
CTGGAAGAAT CCACATGTGC AGCAGGCAGC CCAGAACGCA GCCATGGGGG CAGCCCAGGG	240
TGCCATGAAT CAGCCAAGAC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTTGCCA CACCATGAAG CTCTTGTGGC AGGTAAGTGT GCACCACCAC ACCTGGAATG	60
CCATCCTGCT CCCGTTTCGT TACCTCACGG CGCAAGTGTG GATTCTGTGT GCAGCCATCG	120
CTGCTGCCGC CTCAGCCGGG CCCCAGAACT GCCCTCCGT CTGCTCGTGC AGTAACCAGT	180
TCAGCAAGGT GGTGTGCACG CGCCGGGGCC TCTCCGAGT CCCGCAGGGT ATTCCCTCGA	240
ACACCCGGTT CCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC TTCATGGCCT AGGAAAGATT CGTGTTTAC TTTAATAAAC CTGAAAGAAC	60
TGTCGTTTTT CACTGCCTAT AGGACCACTA CAAAGCCGCA AAGAAAAATT AGACTTGTTT	120
CATTTTATAA CAACAACAAC TGCTACTACT GCTACTAGTT AGATACCGTT TGCTCATTTA	180
TAACAATCTC AGTTGGTAGG ATGAAGCTTA AACACTGGC ATTCATCGTC TTTTTCAGTC	240
CTCTCGAG	248

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC	TTCATGGCCT	ACTGTCTTTT	CATGCAGATT	TCATATTGTC	TTTGTCTTTT	60
TCATTGCTTC	TTGACCTTCC	TGGCAGGTGT	CGCTCAGTTT	CTTCCTGTTT	CCCTTCCTGT	120
CCTCTCCACA	CCTGCTATCC	CGTCCCACTC	CCATCTACCT	CCCGGGAAGC	CAGCCCTGCA	180
TGCTGAGTTT	GTGACCTGCT	TCATTCCCAT	TTCAATTTCTA	GAGGGTTTAG	AGGTGACCTG	240
GAACCGTTCC	CTTCCCTCT	CCTACCCCT	CCTCTGCAAC	ACCAAGAGGC	CTGGAGGGGC	300
AGACAGAAAG	CAGCCAGCCA	CGCGGGAAG	TCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

GAATTCGGCC	TTCATGGCCT	AACTTATTTT	TTTTGTTGAT	TGCCTGTCTT	TCTTTTCTT	60
TCCTTCCCTC	CCTCCCTCCT	TCCCTTCCTT	CCTTCCTTCT	GTAGAGATGA	GGTTTCACCA	120
TGTGGCCAGG	TTGGTCTGTA	GCTTAAGTGG	TCCTCGCACC	TCAGCCTGGC	AAACTGCTGG	180
GATTACAGGT	GTGGGCCATC	ACGCCTGGCC	TTACAGTAAA	TTCTTGATAA	ACAACCCAGC	240
AACACACCTC	GAG					253

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

GAATTCGGCC	TTCATGGCCT	AGGACGGGGG	ACTCAGGTTT	TACACTGGAA	CCTGGGGTCA	60
TGTATCATGT	ACCAGGTGGG	GAGAAGTGTA	GCAAATCTCA	GTGCCAATTT	GAGGGGAAGC	120
CAGTCATTCC	AGGAGAAGAG	CTGAGGGGAA	AGAGCTGTTG	ACTTTTCATA	TGCAGTCTTA	180
ATTATCCAGT	CACCCTCCTG	CCACATGGCA	GAAGCCAGGT	GGCAGTGATG	GTGGTGGGGG	240
AAACAAAACA	CACAGTCTCT	GGCAAGCCCC	ACCGGGAAG	GAGGGCTCAG	AAGGCGTAGC	300
GGGTCCGGAT	ATCCTCGAG					319

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

GAATTCGGCC	TTCATGGCCT	ACAATAAAG	CCCATAGGGA	AGAGAGAGAG	GATATAGGGA	60
AACAGAATCA	GATGTGTAAT	ATACTTGGCA	CAGCGAAAAA	ATGGATTAA	AAGACAAAAA	120
TGGAGGTCCA	GGTAGATGTA	ATTCACACAG	ACTGAAAGTG	AGTTCGGGCT	TGTGTAACAA	180

ACATGAGATT GGATTGACC CCTTGGCTCT CAAGTGTCCT CTTAGATCTA GAACTGCTCC	240
TTGGTGGCCA TTAGATCGAG TCAGTTTGA TCTGCATCAC TTAGTTATTG GGAATTTCTT	300
TGTTGGAAC AGGAAAATT TTTAGATTA TTTGGCGTAC GGCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

GAATTCGGCC TTCATGGCCT AGGCACAGTG AAACCCGTGG AAATTCAAAG GTGAGCAGGA	60
CAGTGGGTCC TGTATCTTGA TCTTTACGGA TCTTTCTCTT CTTGAATCCT CACAGCACCC	120
ATTTTATAGA CAGGAAGACT GAGGCCCGAA AGTTCGTCT GACTCTGAGC CTGGCCTCTT	180
TGCTGCCTCC CGTTGTCCTG TGAGGCTGTG TGGTCACAGC ACCCAGGACT TGAGAGGAGT	240
GAAGTTCTTC CTCACCCGC AAAGGCTTCA TGAGCCCTAC TGTGTGCCAG GCCAGCCCTG	300
CTCAGTCTGG GCGATAAAC ACAGGCAGG TTTCTGAAAGC CTGTGTGAGG GAAGTTCTAG	360
GCCTGCAGGA GCTGAGAGGA GACCCTGGAG AGGAAGGGAG TCAGGGCCAG CTTCTCTGAG	420

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

GAATTCGGCC TTCATGCCTA AGCTGATGGA GACTGTAAAT GAACCAGAAA CAGGTGAAGT	60
GAGCAAAGAT GCAGTCATTG TAAAGCAGGA GAAAAATAAT GAATATTGCC TTCAGGATAT	120
TGATGATAAA TTGTCAGAA CAGCAGAGGA TGATGGTGAA GATGATACCA ATGATGAAGA	180
TGATGATGAA GATAGTAACC CTAAAAAGAA TACTCAGGCC CCACTAGAGT TAATGGCAGA	240
ATTTCTGAGA GCAGAAATGG CCCGAGAGTA CCAGCTGGCA AAAAAATTAT GTCAGATGAT	300
CCTAATCTAT GAACCAGAAA ATCCTGAGGC CAAGGAGTTT TTCACACTTA TTGAAGAAAT	360
GTTGCTGATG GAGAAAATC AGAATCATGA GCAAGACGGT GAAAACAGTG ATGAAGACAG	420
CAGCGGGCTC GAG	433

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

GAATTCGGCC TTCATGGTCT ACAAATCAA CTGCAAGCAG CCATCATCAG TTTGGAAGAA	60
GCCTTGGGAA GCCTTCAAAG AAAACCTCG GTATCCACCA AGTCAGGCTC AAGCAGCTCT	120

TCAAGACAGT	CCCCCTGAAG	AGTACTCCTA	TAAGAAATCA	ATAAGAAACC	TGTTTAAAAA	180
CATTCTTTT	GTCCTTCTGT	TGATCACTTA	TGGTATCATG	ACTGGTGCCT	TTTATTCAGT	240
CTCAACGTTA	TTAAATCAAA	TGATATTGAC	ACAACCTGAG			280

(2) INFORMATION FOR SEQ ID NO:133:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 398 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

GAATTCGGCC	TTCATGGCCT	ACGCGAGCGG	CAGGTGTGCA	CAGGAGGTTT	TCCACTTTGT	60
NCTCTGAAC	TGCGGTCAGG	ATGGTTTTCT	CTGTCAGGCA	GTGTGGCCAT	GTTGGCAGAA	120
CTGAAGAAGT	TTTACTGACG	TTCAGATAT	TCCTTGTCAT	CATTGTCTT	CATGTCGTTT	180
TGGTAACATC	CCTGGAAGAA	GATACTGATA	ATTCCAGTTT	GTCAACACCA	CCTGCTAAAT	240
TATCTGTTGT	CAGTTTGGCC	CCCTCCTCCA	ATGGTACTCC	AGAGGTTGAA	ACAACAAGCC	300
TCAATGATGT	TACTTTAAGC	TACTCCCTT	CAAACGAAAC	AGAAAAAACT	AAAATCACTA	360
TAGTAAAAAC	CTTCAATGCA	TCAGGCGTCA	ATCTCGAG			398

(2) INFORMATION FOR SEQ ID NO:134:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 403 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCGGCC	TTCATGGCCT	AGGGCGATGG	TGGGCAGAGG	ATCCTTAGTG	CTCAGTCGGG	60
CTCCACCAGA	ACCACGGACT	TGAAGGAGAA	GAGACTCTCG	GTTCCAGGTA	GCAGAAAACG	120
TGGAGTTTTG	GACACAGATC	CTCCTGGCCA	GAGAAGGATG	CTTGAGAATC	TGAGATTTAC	180
ACAGCTGTAT	TAGGTTGTCC	ACGATGACCG	GGCAGTAGGT	CTCTCTCTTG	GGGATTTCCT	240
CAGTGGTCTG	CCAGAGACGG	GCGTGAGAGA	TCACATTGAG	AACGCACTCG	TCTTGGTTCT	300
CTATGTGGTT	CCTTGGATCA	TCAACAAGGC	TAAGCACTTT	CTCGGGAAGG	CCTTCTATTA	360
ACTTGGTCTT	GGTGAGCCAG	AGGGCCTGCT	TTACACCCTC	GAG		403

(2) INFORMATION FOR SEQ ID NO:135:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCGGCC	TTCATGGCCT	ACTCCATTTT	TGGAATGGCT	TATTTAGGCC	CAGCTCTTGC	60
GTTTGCAATTG	TCCCTTCAGG	CCCAGAACTT	TCTCAGCTCA	TCGTCACCAG	GCCTAGCTTC	120
TGCATCTGGT	CAGCCTTTTA	AGGCCAGCT	TTTGCCTCAT	AAACTCAGCT	CCTGTTTAAAT	180

GGCGGCCTCC CGGGTCCCAC TCGAG

205

(2) INFORMATION FOR SEQ ID NO:136:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 112 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAATTCGGCC AAAGAGGCCT AGTTTATTAA CTTGGTTAA GACATCAGTT ATTTAGTCT 60
 TTGATAATTC ATTATCTAGA TAATGGTTAC TTTGTATTGT CTGTTTCTCG AG 112

(2) INFORMATION FOR SEQ ID NO:137:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 111 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTCGGCC AAAGAGGCCT ACACAGAGCC CTTCACTACT TTTAATTCTT CTTAAATTGG 60
 TGGTTTCATGT TAATTAAATT ATTATTATTT TTTTGTAGA CGGAACCTCGA G 111

(2) INFORMATION FOR SEQ ID NO:138:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTCGGCC AAAGAGGCCT AAAGATGTTT TCCATGAGGA TCGTCTGCCT GGTCTAAGT 60
 GTGGTGGGCA CAGCATGGAC TGCAGATAGT GGTGAAGGTG ACTTTCTAGC TGAAGGAGGA 120
 GGCCTGCGTG GCCCAAGGCT TGTGGAAGA CATCAATCTG CCTGCAAAGA TTCAGACTGG 180
 CCCTTCTGCT CTGATGAAGA CTGGAACCTAC AAATGCCCTT CTGGCTGCAG GATGAAAGGG 240
 TTGATTGATG AAGTCAATCA AGATTTTACA AACAGAATAA ATAAGCTCAA AAATTCATA 300
 TTTGAATATC AGAAGAATCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:139:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

```
GAATTCGGCC AAAGAGGCCT AGGTCCAGAA ACATTTAAAA AAAAAAAAAA GGGGGCTTGA    60
GAAAAGGGCT TCCAGTGCCA GGCAGAAATA TGTTTTTCTT AATAGGGC    108
```

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

```
GAATTCGGCC AAAGAGGCCT ATGAAAACGT GGATTGCTT TGTAACCTG AGAATACATT    60
TTGTTGCCAA CAAAAGAGA GAAGAGAAGA GGAAGATATT GAAGAGAAGA AATCGATTAA    120
GAAAAAATT AAAGAACTTA AGTTTTTGA TTCTAAAATT GCCCAGAACC TTTGTAAGTA    180
TCATATTCCA ATACCATTCA AAGACAGTGG AAATATTTCT TTAATGATT TCATTTTCTT    240
TAAGACCGAT TATTCATTAT TTGCTATTTT CATTTTGTTA TTATATGCAT GATAAATTCA    300
CAGATACTCT CGAG    314
```

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

```
GAATTCGGCC AAAGAGGCCT AGGGTAAGAC TAGAGTGTTT TAAATCATCA ATAAAAAGTG    60
GAGAAAACAA AGGTTATTCA GCGATTGAAT TCTAGACCTG CCTCGAGCCC TGCCTTTCCT    120
TTACTTTTAC TTTTTTTTTT TTTTCTTTG GAAGAGAGAA GAACAGAGTG TTCGATTNTG    180
CCCTATTTAT GTTNTANTC GGGAAACAAAC GTTGTTGTG TGTGTGTGTG TTTTCTGTG    240
TTGGTTTTTT AAAGAAATGG GNAGAAGAAA AAAAAAATTC TCCGCCCTT TCCTCGATCT    300
CGTCCCCCCC TTCGGTTCTT TCGACCGGTC CCCCTCAAC CTGCCTCGAG    350
```

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 167 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

```
GAATTCGGCC AAAGAGGCCT AGAGAGTCTG GATGACAAGC AAAGCTCAAT CTCAAAACAA    60
```

TAATTTTAA AGTAATGATT ATCTTAACCA TTCTTAAATC CTTCTGTCTA GTAGGAATCT 120
TATTCATGGG AGTGTCTGGA AAAGGGACAA AGAGCGGCTA TCTCGAG 167

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

GAATTCGGCC AAAGAGGCCT AGTGTTCAC AAAAGAATTG GAAACCATAG TCCTGAACTC 60
TCCCTAAGTA GTATAAGCTT TAAATAGCAC TCAATCCATA TTAAGTCTTC TTAGTGTAGC 120
ATGGTTGCTC TCATGCGTCT TTCTTATGTT TTAAATGGTG TAAATTTTAG TCGTTTGTCA 180
TTCAGAAAGTG GCTTTGCAAA TACAAATAT CTCGAG 216

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

TAATCTTTAC TGGTGAAAAG GATGGAAAAA TAAATCAACA AATGCAACCA GTTTGTGAGA 60
AAAAAAAAAA AAAAAAANC CGAAAAAAA AAAAAAACA CCTGAATGCG GAAGAGCTCG 120
GCTCCCGTTT AGCATTTTGT ACTTAAGGAA ATAAAAAACC AACAAAGGAT CTCACATTTT 180
CTTAAAAAGT GAAGATTGCT GTATACTATT TATTCAACTT ATAATTTATG TTAATCCTTG 240
ATCTTTGTCT TTTGTCATGA CAAAGCATTT ATTTAATAAA GTTATGCATT CAGTTCTCGA 300
G 301

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 177 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

GAATTCGGCC AAAGAGGCCT AGTCTCTGTT AATCCTACTC TGCTTTAGCC AGAATAGCCT 60
AGTATTTTAT TTCTATTITA TATATTGAGA TTTCTTCTAA CATTTTCTTT GATAAAAATC 120
TTCTGCTTTT TGAAAAGTGG TATGTATCAT ATTTTATGT TTCTGGTGTG TCTCGAG 177

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

GAATTCGGCC AAAGAGNCGT AGGGAAAGAT TTCAGCTATT AATCAACTGG AGGAAATTCA	60
AAGCCAGCTG GCTTCTCGGG AAATGGATGT CACAAAGGTG TGTGGAGAAA TGCGCTATCA	120
GCTGAATAAA ACCAACATGG AGAAGGATGA GGCAGAAAAG GAGCACAGAG AGTTCAGAGC	180
AAAACTAAC AGGGATNTTG AAATTAAAGA TCAGGAAATA GAGAAATTGA GAATAGAAGT	240
GGATGAAAGC AAACAACACT TGGAACAGGA GCAGCAGAAG GCANCCCTGG CCAGAGAGGA	300
GATTCTCGAG	310

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

GGTGGCCTTG GGTCAAGATT CGCACCATGG TGGGCACAAA CCCAGGAGAA CACTTTCCTG	60
TAAACGTGTT TTCATGCTGG AGCCAAGGTT TTGACTTGGG TTTGGATTTT TATTATTATA	120
TTTATTATTA TTATTACCAG GTTGATCTTA AAGGATGTTT TGGAGGAGCA CAGAGTTTGT	180
CTGGTGAGGG TAGGCTCTGG GCAGATTTTT CTGTGAGTCT CCCCTGCCTG CGGCATCAGG	240
ATCATCCCTG GTGCCCTGTG GTGGCACCAG GTGGCTGCCC ACCCACAGGC GTGGCCTTCA	300
CAGTGGGGGC CATCTCAGCC TGGGGTAGCG ATCTGCCTCC GACCTGCCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

GGCCTGCATC GCAACAGCCA GGAGGGCCAG GCCACCCAG GCAGGAGGCA GTGGGCTGGC	60
AGCCACCCCTG GGCACAGAAG AGCAGACGCA GACAGTGCTG GGCAACGAGG GGCTTCTTC	120
ATGGGCCCCG CTGCCCTGTC CCTCCCCCA GGTCCCCACC TTCTAGGGTT AAAGTGCAGC	180
TGGGAGGGGAG GAGGCAGGCA GAATTGGGGA GCTAGAGAGA GCCCAAGTGA ACCCTGACTG	240
TCCACGCAAG TCCCATGTCC TCCTCGTCCT GGAGTTCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

```

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGTTCCTT TTGTTATTTT CCTGCATCTT    60
ACAACGTTAA GGCCTTGGTC CCTGCTAATA ATAAAATAAT AATCAACTTT ATAAAGAGCT    120
TACAATATGC CAGATACTGT ACTAAGTGCT TTATATTTTT TTTTGGGTG GGGGGTGGCT    180
GTGGGGCAGT GTCTCGCTCT GTCACCCAGG CTGGAGGGCA GTGGCACAGT CATGGCTCAC    240
TGCGGCCTTG ACCTCCTGGG CTCAGGCCTC CCGCCTCAGC CTCCCAGGTG GCTGGGGCTA    300
CGGGCGTGCA ACATTCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

```

GAATTCGGCC TTCATGGCCT ACGTAATTCT GAAAAAGTGA ATACTTGTGA AGAGTCGTCT    60
TGAATGATT GTAAAAAATC CTGTTCTTAT ATTCAACGAG TTTCGAATCT TTGTCAGAGG    120
AGTATTACCA TTAGATTGAA AAAAAGGAAA ATAAATAATA AACACTTTTA AAAAACTCC    180
CCATTCTCTT ATTCTCACTT TTAGGAAAAG AGACTGACTA ATATCTTCTG CCACAAATAC    240
CGATGTTCTT AAAAATATTT ATGGGACTGC TTTTGGCAAC CAGCCCTATT TTGTTTTCAT    300
ATCCCTTTTT GCTCCCATCT TTCCAAACTC ATAAACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

```

GAATTCGGCC TTCATGGCCT ACTGCCTCT ACTAAAAATA CAAAATTAG CCAGGCACGC    60
GCCAGGTGGT GCGCACCTGT AATCCCAGCT ACTAGGGAGA CTGAGGCGGG AGAATTGCTT    120
GAACCTGAGA GGTAGAGGTT GCACATAGCG CCACTGCGCT CCAGCCTGGG CAACAAGAGT    180
GAGACTCTGT CTCAAAAAAA TATATAAATA AATAAATGAA AAAAAATAAT TGTATAACAT    240
CTATACTATA GCCTCGTAAG CATTAGCTAC TTAATATTTT TGGTATATTT AATAATTTTA    300
ATACAGCATT TTTGATTACT AGTGAACATG AATATTTTCC CATATTTGTT AATTATACTT    360
TCCTCTTACA GAAATTCTGT TTGTGTCCTT CACCCCTCAC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

GAATTCGGCC TTCAGGGCTC CTTCTTCCTA GGCTAGTATT TATCCCACTA CATCTGACTC	60
ATTCTCTACT ATCGCTGTTG ATTCTCTCTT GGGTACTAAA TCTGTTGAAC ATGTTGCCAG	120
GCTTACTGCT GGTATTATGG GATAGCATTT GCCTGATGGC AGCTTCTAAA GGAGACTCCG	180
ATGGCACTAA GCAGTTTCCA AAAGTTTATC TTGCAAGTTC AACCCAATTC GAG	233

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

GAATTCTAGA CTGCGCTCGA GATGTTTTTT TCGTTATTTG AAATCTTTGC TCTTTTATTT	60
TTCAGCTCCC AGATCCTCTC CCTCTCTTTA GCTTTCAC TGTTTGATAT CAAGAATATG	120
AAATGTGAAT TCCACGGACT CGAG	144

(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

GAATTCGGCC TTCATGGCCT AGGCAGGAAG GAGGCTGGAA TAAATAAAAA TAAAAATAGA	60
CAGTAAGAC AGCATAAATA ATACATTTTT AAACATGTCA ACATTGATAA TACAATGAAG	120
ATTTACCATA AAAAGTATCA TATCTAACCA AGATATGCAA AAGATGCATT CAGTAAGCTG	180
TACGTTGAG AAATGTAACT GTGAAATCAG CTCACCAGTT CAAGTCACTA GGTTTGCCAC	240
TTGGACCGTC TTGGTTTCAG CGAGCATAGC GAGTGGCTGT AAGAAATTGT CCATGCCACC	300
AATTCCACTG CTAATTGCCC AGGTGGTCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

GAATTCGGCC TTCATGGCCT AGGAAGTGGA GGGAAAGCTGG GTCGCTGCTG GAAGGGAGGG	60
AGGCTGACTC TCTACCCCTC ACCTCTGCAA GGAAGTGAAG CCTGTAGGGT TGC GGCTGTC	120
ACTGGCTACA GGCGGCATCT TTCTGTAAAA AGCTTTTCAG GCATGAAACC CATTTCGTGA	180
TGGACTGGGC TGTGTTGACG GTGGTGCTTG GGCCTTGTGT GCCAGGCCTC TCTGGGTCCC	240

CTCCCTGGCC TTGCCTTC TCTCACCTTC TCGAG

275

(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

```

GAATTCGGCC TTCATGGCCT AGAGTCATAG GTCAGACCAC TTTCTAGGAG CTGTTCAGTG      60
ATAAAATTAA TAACAGTGAC TTTTGAGTCA AAATAGATT TTAAGTACT TGATTTCTC      120
TTTGATTGG AAACATCTTT GTTAGCTTA ATTGAAATGA TCTAAATAT TTGAAGGATT      180
TTATACTTTA CACAGAGGCA TGTATTGGA TAATTAGCTT TTATTAAACC CAGGCTTCCT      240
CGAG                                         244

```

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

```

GCGATTGAAT TCTAGACCTG CCTGAACCCC ACCCTTCACG TCCTACTTGG GCTGCCAAAG      60
TCATCTTCCC AAAACATGAC TTTTCCTCAG TCACTTTCT TATTAGATT TATCATATTC      120
CACATCCCTT CCCTGGCCT CAAGGGTGCC TGTAACCTAG AACCATCTTA CCTTCCACC      180
CTTGTTTCCA AACCTCCGC TTTACTTGA CATGCCTTC CATTTCCTC CCGACCCACC      240
CCCCTCGAG                                         249

```

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

```

GAATTCGGCC TTCATGGCCT AGAAAAAAC AAGTAGTTTG GCAAGGAGAG CAGAAAAATA      60
AAATTCCACT GTGTAGGCAT TTGGAGATT AGCAAGAGCA ACCTAGAGTC TGCCCCCAGA      120
GACACTGCAC GTTGTCTCT ACACAGAGGA TGCACTAATT CTATTCCTG TGCCACCTGA      180
AAAAATCATA ATTTGAGAAG AGAACTGTT AGGCCATTTC TAGTGAAC TAATTTCCAAA      240
CCCTCACGGA ACCCTGAACA GGGCGTGTCT CGAG                                         274

```

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

```
GAATTCGGCC TTCATGGCCT AAGCTTGCTC ACTCTTCTGT GTGTTTGAAA TAATGGTAAA    60
ATACAATAAT ATTGTCAAGC ACAGTGGATC GGAGATTTTT CTTCCTCAGGA CTATTCTGCT    120
TATAGGTCTA CTCCTATAG CTATTGTCA TTGTCCTCCT GGTCTTCTC TTTTCTTCTC    180
TCCTGTGCTA GATGCTCTCT CTCCTATCC CTCCTCTCT TCCCACCCCC ACCTCCCACT    240
TCTCTGTTTA TATCCTGATT TTGGTGAAC ACATCCTCCA GGCTCCCTGG CACTCGAG    298
```

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

```
ATGGCCTAAG GTGCCNAGC TTGCCAATTA ATTCCCAGTA GAAATTTTAA AATGTTAAAG    60
ACAGTAATTA AAAAAAAAAA AAAACCACAC TGTTTGACA TTTTACCTCG TGCTTTGTGT    120
GTGACTAGAT TATGCACTAG AATTTTCATTC AGTATTCTTC CAAATAAGTT ATTTCCCAGG    180
TGTTGCTGG TATCTAACCA ANTANTCAAT AAAGTATTCT TGCTAAGTNG GCCATGAAG    239
```

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

```
GAATTCGGCC TTCATGGCCT AATATCATGA TCACTGAAAT TACATCTAGT GAAACACACA    60
CGTGCTTATC TGCACGTGTG TGTAAGTTAG AAAGAAAAAA CAAAGGCCTA ACAGTGATTG    120
TCTTAGGTTG ATAGGATAGT GGGTGGGATT TGCAGAATTT TTGTATCTGC AGAATTTTTG    180
CAAAGTGCCC ATTAGTTTTG TAAAGAAAAA AACCTAAATG TATACTTCT AAAGAGATAA    240
TTTTTCTTT CATGTTTTTG CTACCTATAT CTAGGAAAAT AACTTAGAAT TGTAAATTATT    300
TTGAAGCTCT GGAATTATTA TGTTCAAAAA TTACAGAACC AAAAAGTCTC GAG    353
```

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```

GAATTCGGCC TTCATGGCCT ACTTGCTGTG GCTGACTCGG TTATTGACTT TACTTCTTTT    60
CTTTTCAGGT TTTTATGGGA CTGTTTCTAG CCCTGATTCA GGTGTGTATG AAATGAAGAT    120
TGGCTCCATC ATCTTCCAGG TGGCTTCTGG AGATATCACG AAAGAAGAGG CAGATGTGAT    180
TGTAATTCAC ACATCAAACCT CATTCAATCT CAAAGCAGGG GTCTCCAAAG CAATTTTAGA    240
ATGTGCTGGA CAAAATGTAG AAAGGGAATG TTCTCAGCAA GCTCAGCAGC GCAAAAATGA    300
TTATATAATC ACCGGAGGTG GATTTTTGAG GTGCAAGAAT ATCATTCTATG TAATTGGTGG    360
AAATGATGTC AAGAGTTCAG TTTCTCTGT TTTGCAGGAG TGTGAAAAAA AAAATTACTC    420
ATCCATTTCG CTCCAGCCA TTGGGACAGG AAATGCCAAA CAACTCGAG                    469

```

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```

GATTTATTCA TTCTTGATTA AATGCACTGA AAAGTAAAGG GTCTGTTTGT GTCATGTTCA    60
TGAAAATGCG GTTAGAGAGG TGCTATTCAA GTGATTCTGA AGGCACCCCA AGGTATATCT    120
GTAATTTAAA GATTACTGCA AATATCTTTA CTTTACTGTG GGTTTTGTAGT ACATCTGTTA    180
ATTTAGTGTT TCTTTGTGTG TTTTGTAGAC TAGTGTCTT CCATCCTTCA ACTGAGCTCG    240
AG                                         242

```

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```

GAATTCGGCC TTCATGGCCT AGCATTTTTT TTCTTTAAAT TATTGTATCC ACTAGTTCTT    60
GCCAGTATAA AGGAATACAA TTGACTTTTG TGTGTTTCAT ACGCTACAAC CTTTCTAAAT    120
TCACTTATCA GGTCCAGAAC TCTTCTACTA ACAATGCACT TTTATAAAGC CCTAACACCT    180
CTCCTGATCT CTGTCTCACC CTCCACCTA TCTCACTGTG GGATGGGAAG GAAGTCAATG    240
GAAAACACAG GAGCGCATT TAATAATAGC CCACATGGTA TACTCGAG                    288

```

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

GAATTCGGCC TTCATGGCCT AGCTCGATCC AAGAAGAAAA ATTAAATGA CAGCTTTTCC	60
CATTGATATA ATCATCTTAC TTTGCTCTCT ACAAGAAATA TGCATTAGGA ACCTTCATTA	120
TAGGTCCACA GAAATAGCAG AACACAAAAG CGCCCCCTA CCCCCCGCC CCGTAACCA	180
GAAATACACA GAGGCAGAG	199

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

GAATTCGGCC TCATGGCCTA GAATTAACCA ATTAAGAATT AATAAATTAC TTATAAAATT	60
AAAAATCAGG AATACCAGGC TTAATGCATT CATTATTCT ATTTAGCAA CTTTTTTTTT	120
TTTTTTGAAT GCCACAATG TCCTAGGTTT TGGAAATACA AAATTACTTG GTACCACTAA	180
CTCGACTGTC ACCTTTCCAG CCATGGACTT GGTTGAGACA AACCCCACT CCACGGTTGT	240
CGTCCACTTG CAGTGCCCGC CGACTGTGGA TATATGCTGG GGATCCCAAC ACAACGCAGC	300
TACTCTCGAG	310

(2) INFORMATION FOR SEQ ID NO:167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 187 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

GAATTCGGCC TTCATGGCCT AGTAAATATT TTCTTCTACT TTGTGTTTG CTTTTTGT	60
TTCTCAGCAT TATTTTTGA AGACAAAAG ATTGATTTTG AAGAAGTCTA ATTTATCAGG	120
TTTTTTCTAG TAGTTGTAG CGGATTNTG CATGCTGCTT TAAAAAAT CTTTGCTAAC	180
CCTCGAG	187

(2) INFORMATION FOR SEQ ID NO:168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

GAATTCTAGA CTGCCTCGA GCCTTGCCCA GAATCAGCAA GTAACTGCA CTAATTTGTC	60
TTATATTGA CTTTCTAACA CTGATTTTTC TGATTTTTC CTGTTGACC CTCCAATTTA	120
TAAAAATGTG TATAATTGTT CTGCTGCTTC TGCTTTTGCC TGCTTTGGCT GCTGCATATA	180

CAGGTGAAGA TCTGGAAAGA AATGATGGAT CTACAGAAAA ACCCTACTTC GTAACCCCTA 240
ACCTGCATGG AATTCTGATC AAGAAGCAAC TCGAG 275

(2) INFORMATION FOR SEQ ID NO:169:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 287 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

GAATTCGGCC TTCATGGCCT AGTTTCACAT TGTCTGTACT GTGTTGTGCA GTACCAGAAG 60
 TTGCTGGTAG CTAATTGGTC TTCTGGGACC TGCCATTGCA GACGTGGTGA TTGTAATCTT 120
 AATCTTGTTG AAACAGGATG GATTTATGAC TGGGATGGCC GGAAGCCACA CCAGACACCC 180
 AGTCACCTGG TCATGGGAGA GGTACTTTGT TGGCTTTTCA TAGTACTTAA CACTGTGAGC 240
 TGCTTCTGA AGTGGCACTC TTAAGGCCAG GTGCCCCCAC CCTCGAG 287

(2) INFORMATION FOR SEQ ID NO:170:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 314 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

GAATTCGGCC TTCATGGCCT AAGACAGACA TTTTGGCAG AGCATAGATG AAAATGGCAA 60
 GTTCCCTGGC TTTCTTCTG CTCACTTTC ATGTCTCCCT CCTCTGGTC CAGCTGCTCA 120
 CTCCTTGCTC AGCTCAGTTT TCTGTGCTTG GACCCTCTGG GCCATCCTG GCCATGGTGG 180
 GTGAAGACGC TGATCTGCCC TGTCACCTGT TCCCGACCAT GAGTGCAGAG ACCATGGAGC 240
 TGAAGTGGGT AAGTTCCAGC CTAAGGCAGG TGGTGAATGT GTATGCAGAT GGAAAGGAAG 300
 TGAAGACCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:171:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 195 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

GAATTCGCCT TCATGGCCTA CACCAAGTTG AATCCCTATG CAGGAGGAGA CGGCCTTCAG 60
 AACCAACCTGT CCCCCAAGAC AAAGGGCACT CCTGTGCACC TGGGCACCAT CGTGGGCATC 120
 GTGCTGGCAG TCCTCCTCGT GCGGGCCATC ATCCTGGCTG GAATTTACAT CAATGGCCAC 180
 CCCACATCCC TCGAG 195

(2) INFORMATION FOR SEQ ID NO:172:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 238 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

```
GAATTCGGCC TTCATGGCCT ACACTCCTGG TCATTTTGCA TTTTATCCAG CTTTTTTTCA    60
TCAACCATGT TATCCTGACA GACACATTTA TTGGATATTT AGTTGGAAAT ACCTTATGGT    120
TGGTTGCAGT TGGCTATTAT ATCTATGTAA CTTTCCTGGG ATACAGTGCA TTGCCATTTT    180
TGAAAAATAC AGTAATTCTT CTGTATCCAT TTGCACCTCT GATTCTGCTC AACTCGAG    238
```

(2) INFORMATION FOR SEQ ID NO:173:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 234 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

```
GAATTCGGCC TTCATGGCCT AGGCTAACGT AATTGAGAAA ACCAAATGAA ATATATCTTG    60
ACCAATAATT TAAACCATA TCAGAGATTC AGTTTGGTTC TGTCTTCTGC TTTACTGATT    120
TTAGGATCAG CCTCATACAA AAGGGTAATG GTGGCAGCAG CTCCAGAACT CATATCATAT    180
CCTCCCATGT TAAAGTCAAA TGAGAAAAGT CTGTCTTCGC CCCAGGATCT CGAG        234
```

(2) INFORMATION FOR SEQ ID NO:174:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

```
GAATTCGGCC TTCATGGCCT ACTCAGTTCC ATTGTTAAGC AAGGAAAAAC AAACAATACA    60
TTGAATTGGA CAACCCACTG AAGTTGCAGA TAATGAGGAC TTACCATTTG ATACCATTAT    120
TCATCTGGAC CTATATGTTT CATACAGTTG ACACCATCCT ATTACAAGAA AAACCTAACA    180
GTTATTTATC AAGCAAAAAG ATAGTGGGTC TGACAAAAGA TGACGGTAAA ATGCTACGTC    240
ACACCCTCGA G                    251
```

(2) INFORMATION FOR SEQ ID NO:175:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 239 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

GAATTCGGCC	TTCATGGCCT	AAACCACTGC	GCACCATATT	TCTTAAGGAT	GTTCTGAAGA	60
CCCATGAATG	TCTGGTCAAG	TCTGCTGATC	TCTTAATGAG	GGACAACTG	TTTGAAATAA	120
TAACAAGCTC	CAGGACATTC	TACGTACAGG	CAGACAGTCC	AGAAGACATG	CACAGCTGGA	180
TTAAGGAGAT	TGGCGCAGCT	GTCCAGGCCC	TCAAGTGCCA	CTAGGCCATG	AAGGCCGAA	239

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

GAAAACCCCA	GATATTCCTT	ATTATGGAAG	AAGAAGCAGG	AAATATGTTT	TTGAATAATG	60
TGGGTCAGAG	AATTGTGCAT	TTATTATTGC	TAGGATGCAT	ATACACATTG	AACTCAGTCA	120
ACTTACTCTC	TCTAAATTAT	CTCACCGGTG	GAGACATTGC	CTCAGGAGTC	GAGCCCTGTG	180
GTGTGCCTCC	TGCTGTCACC	ACATTTGACC	ACCTAACTGA	CCCCACTGTG	GTCACCTTTG	240
CCACCAATCT	CGAG					254

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

GAATTCGGCC	TTGCCAGTAT	TCATGCTGTT	GCTTCAGTCA	AGAATGAATT	CCTCAGCGCT	60
ACCTCTCTTG	ACCTTCACAT	CTTACTTAGT	GCAAATGCTG	TCTCCTCCTG	AGACTTGCCT	120
GACTTCGGAT	ACTCTCCCTG	TGACATCTTA	TCTAAATGT	CAAGTGAGAC	TCGAG	175

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

GAATTCGGCC	TTCATGGCCT	AAGTGGCTGT	GTGGTATTTT	CTAAGTATTT	TTAAAATTTT	60
TCTCTCATTG	ATACCCTATA	AAAATGCAAC	TGTTAAAGAA	TTTGTCTTTC	TTTCTCATT	120
TATTCTTTCC	AGAGTATATA	ACTAATTAT	TCAGCATTC	TTCATTGAGC	AGATATTTGT	180
TGAGCACTAA	CTATGTTTCA	GCACTGGGCA	GGGATATCGG	GATACCAAGA	AAGCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

GAATTCGGCC	TTCATGGCCT	AGAAAATAAT	TTAGAGAAAG	AATAGAAAGT	CATGGAAAAT	60
CTCATAGGTA	GGAGACAGAA	GAGAGAACAT	TGTAAATAAG	TTTAAAAAAG	ATAAGAAAAT	120
CAGGATAAAG	TAGTATGGAC	TCTGAGGTGG	GAGAGAATTT	TAAGATTAGC	AGGAAAGTAG	180
TGTAGTTGGT	ACTTTTGTAGT	TATTAACAAA	GCACTCACTT	CTTACAGAGT	CTCGAG	236

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

GAATTCGGCC	TTCATGGCCT	ACGAAGATTA	TAATGTATTT	TTATTCTGTT	TTCAGCTTCA	60
TGTTTCCTGT	TGCAGGTGGG	ATAAGACCCC	CTCAAGGCCT	GATGCCGATG	CAGCAACAAG	120
GATTTCTTAT	GGTCTCTGTC	ATGCAGCCTA	ATATGCAAGG	CATTATGGGA	ATGAATTACA	180
GCTCTCAGAT	GTCCCAAGGA	CCTATTGCTA	TGCAGGCAGG	AATACCAATG	GGACCAATGC	240
CAGCAGCGGG	AATGCCTTAC	CTAGGACAAG	CACCCTTCCT	GGGCATGCGT	CCTCCAGGCC	300
CACAGTACAC	TCCAGACATG	CAGAAGCAGT	TTGCCGAAGA	GCAGCAGAAA	CGATTTGAAC	360
AGCAGCAAAA	ACTCTTAGAA	GAAGAAAGAA	AAAGACGCCA	GTATCTCGAG		410

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

GAATTCGGCC	TTCATGGCCT	ACACATTTGC	ATTGTCTGCC	CATGGACTGG	TTGGAGCAGA	60
AACCTCCATA	CCTCAGTCTC	TTGGTATTTG	TCTGCCCCAA	CTGCTGCTTT	TTGTTGGGAT	120
GTTTGTGTGT	GCTGGGGTCT	CGGCAGCATC	GGCTGCTTCC	CGGTGCGCAC	TGACATGCAC	180
TTGTTCTCCA	CGATGGCTTT	CTCTACCTTC	TGAGATGCTC	CATTATCAGT	CCTGCCTTTG	240
TTCCGGAGAG	TTGAGATGGT	ATCACTTCTC	ATCCATCCTT	AGAAATACCC	CTCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

GAATTCGGCC	TTCATGGCCT	AGGGGGCTGG	TAGTGAATA	TTTGGTACTG	AAAGTGTGAA	60
GACCTCTGCT	GGGGACTGAA	CAGAGGGAGT	GTCTTCTGCT	GGTGGTGTGA	AATCTATCTC	120
ATCATCAAAA	TTATCTTCAA	ATTCTTTAAA	GTCTATTTCT	GGGTCCTTAC	AGCAGGATAC	180
ACAGTTTGCA	ATTAACACTA	TTAATATTAT	TAAACTGCAC	ACACACAGGA	TCACAAAAGA	240
TGAGGAAACT	TCTGCAGCAG	GTGGCGCTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

GAATTCGGCC	TTCATGGCCT	ACTACTTATC	ATCCCTGCTC	ACACACCCTT	GTCCAAGGCT	60
TTATGCATCG	GATTTATTTT	TCCAAATCAA	GAGGACAGTG	ATAGATGCAT	TTTCCCCAGG	120
CTGTCTCAGA	AAGGTCGCTA	AATGTATACT	GTGTCAGAA	TGCTGAGAT	CTCCCCCAGC	180
TTTTGGTTTT	TGCAGCAGTA	AAAACCTCTT	CCACTGTGAC	TTATTTTCTC	TCTCAGGCAG	240
CAGACTCGAG						250

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

GAATTCGGCC	TTCATGGCCT	AGATCTTCTC	CCCATTGAGC	AAAACCTTCC	CATTCCGGTT	60
AATGGTTTTG	ACAAGCAGGG	CACCACGGGG	CATAAAATTG	TATCATCCAG	CCTCCTTCCA	120
GCAGCTCTCT	CCAGTTCTTG	TCTGTGATGA	TGCGTACGTT	GCTCTGCCGC	CTGTGGGTCC	180
AGGGAGCACC	CCCAAGCAAC	AGTACCAGGA	CTGCCAGCGG	AACTGCAAGA	CTCCTGGAGG	240
GTGCCATGTC	TGCCACTTGC	CCACCTCACA	GCAAGCGTGG	CGGCCCAACA	CTAGGTTTTT	300
TAAAAACTGT	GACTATCAGT	GTTTTAAAAA	TTGCCCGGTA	ACTCTAGACT	TCAAAAGTGG	360
GATAAGTAAT	GATAAACCAA	TAATAAACCC	TGCCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 185 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

GAATTCGGCC AAAGAGGCCT AAAAATTAAT ATTACCTTAT GACTGCCTTT ATCATGACTC	60
TCTTAGTGGG GATTTCTGTC CTCCACATGC CCTGGGGGAT GTGCAGCCCC CGTGCACTCC	120
CCGCCTTGGC CGGCCCTTC CCCCATGCCC AGGTAGACTC TGAGCTCTTA GCCCAGCAAC	180
TCGAG	185

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

GAATTCGGCC AAAGAGGCCT AGGGAACATA TCTTAAACAC TGAACCTCTT TTCAGCAAAT	60
TGGCTTTCTA GTTCTCAGC TCTCTCTTA CACCTCTAAA TCTCTTCCT GGCAAGATCA	120
TTTATTTGCC TTGGTTTATG GTGATACTCT TCATTGTTAT ACTGGTGGGT GATTGTTTA	180
ATTCATAGCT GTTTTTTCT ACTTCAGGAA GATGACACTG CTGGCTCTGC TGGCTCTGAT	240
GTTTACCTTG TGGCTAATGC CTGTGTTTGC CTGTGTTTAC ATTTATTCCA CGATTCAATT	300
GTAAACATTT ACTAAGCTCG AG	322

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

GAATTCGGCC AAAGAGGCCT ACTCATAACA GCGTCAGAGA GAAAGAACTG ACTGAAACGT	60
TTGAGATGAA GAAAGTTCTC CTCCTGATCA CAGCCATCTT GGCAGTGGCT GTTGGTTTCC	120
CAGTCTCTCA AGACCAGGAA CGAGAAAAAA GAAGTATCAG TGACAGCGAT GAATTAGCTT	180
CAGGGTTTTT TGTGTTCCCT TACCCATATC CATTTCGCCC ACTTCCACCA ATTCCATTTC	240
CAAGATTTC ATGGTTTAGA CGTAATTTTC CTATTCCAAT ACCTGAATCT GCCCCTACAA	300
CTCCCCACCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

GAATTCGGCC	AAAGAGGCCT	ATTATGCTGG	TGCTGTCTAC	TAATTTCAAG	AAAACTACA	60
AGTCTGGCTA	GACTCTGCTA	CCGCCTAGCA	CTGAGGTGTG	GTCCTTTATC	TGTTATTACA	120
TTCTTCGTGA	TAATGAAATT	CTGAAACACA	TGCTCCAGGC	ACCTTTGTAA	ATGTGAAGGT	180
GAATAAAGTA	TTTGTTTGTT	GTCGTAAAAG	AGATCTTTGA	AATGTTAAGT	TGCCACAGAC	240
CCAGACCAAG	GAGCCTGCTG	AGAGTTTAA	AGGCTCTTAT	TGGATGACAG	TAGATTCTTT	300
CCTTGAAATG	TCTATAATGA	ATATTCAAGA	ATGCTCATTG	TGCATGAAAT	TTGCAATTTT	360
AATTATCAGT	GAAAGAAAAG	ATTACACAGT	GCTAAATGAT	TGCCATGGAA	AAGTTATGGC	420
TACCTCTTGG	AGTAGAGAAA	ATCTCAAAGG	CCGCTACTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

GAATTCGGCC	AAAGAGGCCT	AGTGGGCAAC	TTGAGAAGA	GTGAAAACA	CTAAAGAATC	60
ATCTCTTTTC	CGAGTCACAA	AGTCCCATGA	ACTTTGTGAC	TCAGAGACAC	TTTTCGTGAA	120
AATTACCTTT	CGCGGGGACA	CCGTCTCAGG	GCAGCTTTT	CAAGGCTTCG	CTTGACATGA	180
TTTCCTTCCC	TTCATCAGTC	ACTTTGATC	CAGCTGAATA	TCTCTCTCGG	GTGAGAGCGG	240
ATGTGGACTG	GCCTCCACA	GAAGAAGAGT	AGGTGGCTTT	GGTGGGGGTT	GGGGTGCGGG	300
CTGGCTTCCT	GGTCTCGAG					319

(2) INFORMATION FOR SEQ ID NO:190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

GAATTCGGCC	AAAGAGGCCT	AGTGAAAAGA	AAGAGACTGT	NAAATAATTC	TGCATATCCT	60
CAGTGGATAA	TTCTGTNACC	TATCTGTCAG	CTATTCCATA	TCAATAAAGG	ACACAGCTGG	120
TAATCCAAAA	GGAAAGGATC	TCTTGATGAA	AGTGTTCTGC	CATTCTTATT	AAAGTCAACA	180
TACAAGATAC	ACTCTTAGTG	ATTTTGAAC	CCATAATTAT	ATTGTCTGA	TAATAATTGG	240
CACTTAACGG	TTACAGAACA	CTTTCACTGA	TATTTTCCTT	AGTGAATCTT	AACAACAATT	300
CTACCAGTAA	TTTCTAATAT	TTGCCATGAT	TAGACTTTCA	AAATTAGTCC	ACGCACTCGA	360
G						361

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

GAATTCGGCC	AAAGAGGCCT	AAGAAACATG	GCGGCCGCGA	CGTTGACTTC	GAAATTGTAC	60
TCCCTGCTGT	TCCGCAGGAC	CTCCACCTTC	GCCCTCACCA	TCATCGTGGG	CGTCATGTTC	120
TTCGAGCGCG	CCTTCGATCA	AGGCGCGGAC	GCTATCTACG	ACCACATCAA	CGAGGGGAAG	180
CTGTGGAAAC	ACATCAAGCA	CAAGTATGAG	AACAAGTAGT	TCCTTGGAGG	CCCCCATCCA	240
GGCCAGAAGG	ACCAGGTCCA	CCCAGCAGCT	GTTTGCCAG	AGCTGGAGCC	TCAGCTTGAA	300
GATGATGCTC	AAGGTACTCT	TCATGGACCA	CCATTGCTG	TTGGCAAGAA	ACGGCTTTAC	360
TTACAAAACA	GTCTCGAG					378

(2) INFORMATION FOR SEQ ID NO:192:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 175 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

GAATTCGGCC	AAAGAGGCCT	ACTCTGAATT	AATGCAAATT	CCCGTTGTAC	TGTATTTAAT	60
TATGCACAAA	ATGGTGCCCT	TGACTCAGAT	TTCACTGAAG	AACTTCATTT	TTTTACTTTT	120
AAGTCTCCAA	GTAGGAAATT	CAATTAGCGT	TATGAAAGAA	ACACTAAAAC	TCGAG	175

(2) INFORMATION FOR SEQ ID NO:193:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 700 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

GAATTCGGCC	AAAGAGGCCT	AGGCAGCAAT	GTTATCTGTC	CTTCATTCTT	GCATGTTTTT	60
GGAAATTGCT	TTTGCTTTTA	CTTTGGTTCG	TCATGGCAAT	CACGTGCCTT	CTCTGGTTCA	120
TTTTCACAG	ACCTGCCTAG	AGCTGGAACG	TTACCTCCAG	AGCGAGCCCT	GCTATGTTTC	180
AGCCTCAGAA	ATCAAATTTG	ACAGCCAGGA	AGATCTGTGG	ACCAAAATCA	TTCTGGCTCG	240
GGAGAAAAAG	GAGGAATCCG	AACTGAAGAT	ATCTTCCAGT	CCTCCAGAGG	ACACTCTCAT	300
CAGCCCGAGC	TTTTGTTTACA	ACTTAGAGAC	CAACAGCCTG	AACTCAGATG	TCAGCAGCGA	360
ATCCTCTGAC	AGCTCCGAGG	AACTTTCTCC	CACGGCCAAG	TTTACCTCCG	ACCCCATGG	420
CGAAGTTTTG	GTCACTCTCG	GAAAATTGAG	CTCCTCTGTC	ACCTCCACGC	CTCCATCTTC	480
TCCGGAAC TG	AGCAGGGAAC	CTTCTCAACT	GTGGGGTTGC	GTGCCCCGGG	AGCTGCCCTC	540
GCCAGGGAAG	GTGCGCAGCG	GGACTTCGGG	GAAGCCAGGT	GACAAGGGAA	ATGGCGATGC	600
CTCCCCGAC	GGCAGGAGGA	GGGTGCACCG	GTGCCACTTT	AACGGCTGCA	GGAAAGTTTA	660
CACCAAAAGC	TCCCACTTGA	AAGCACACCA	ACGGCTCGAG			700

(2) INFORMATION FOR SEQ ID NO:194:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 453 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC	AAAGAGGCCT	AGAAAAATAC	TTGGGCAGAA	AGAAAATATC	ATCAAATAAC	60
ACCTATTTCT	TTTCAGCTAT	AGAGATGGCT	GGATATCAAA	AGCACCACGG	GAGCTTTGCA	120
ATTTGCTGCC	TCTTTTCAGC	CCTCAGCTTG	ACTCTCAGTT	TTCAAGAGGG	AGAAAATGAA	180
TGTTTCCCAG	CATTCTCTGT	CCTTTGCTCC	AAAGAAGAGA	GCAGGTGTTG	GCTTCCAAAC	240
CTTCCGTATT	TTCTTATTGC	TGTTAGGGGG	ATCAACTGCA	TGTTTCCTGA	GGGAAAAGGG	300
TGGCTCACTG	ACCTACTTGA	AGGCATTCTC	TCAGTGGAAG	CTGGGCAAGA	GAATCCAGGG	360
ATTTCTTTTG	CAGGTTTCTG	CGCAGTGCCC	CTGCCATCAA	GCTGCCTAAA	ATGTGAATAT	420
TGCTTCCCTG	CGTTTCAGAG	GTGGCCGCTC	GAG			453

(2) INFORMATION FOR SEQ ID NO:195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC	AAAGAGGCCT	ACAAAATGTG	AATGGAACAA	ACCTGCACGT	GTACCCTTGG	60
ATGTGTGGAT	GTTCTTTGTT	TTTATTTGTT	AAACCTGATG	TCTTGTCTGT	ATGACACATT	120
TATTGGAAAC	GTTTTTCCC	TATTCTGTGT	CTTGATTTT	ATTTTCTCGT	GTTCTCCAAA	180
GAGCAGATAT	TTTAAATTTT	TATATAAATC	CAGTTTGTC	ACATTTTAA	AGGGTTCATG	240
CTTTTGTAT	CCTATTTTCA	AAAACCTTGG	CTACTTCAAG	GTCACAAAGA	TTTTGGATT	300
GTTTTAATCT	ACAAGTTT	TAGCTTTGAC	TTTTATATAT	AAGTCTGATT	CATTGGAGT	360
TAATTTTGT	GTACAGTGTC	AATTAAGGGT	CTAGGTTTCT	TTATTTTCTT	ATGAATATCC	420
AATGGTTCCT	CGAG					434

(2) INFORMATION FOR SEQ ID NO:196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCGGCC	AAAGAGGCCT	ACAAACACAG	AACATTTCCA	TCGTTGCAGA	GAGTACTATT	60
AGAGAGCAGT	ATTCCAGAGC	CTGTGATCTT	AATCACTACA	CCTAAAGCCT	CCCAGTTGAC	120
AAAGTTACCA	CCTTTTTTTG	GTGTGTGTGC	ACGTGCGTGT	GTGTGTGTGT	AAGTATATAT	180
AATTTAAATC	ATTCCATTAA	ATTACCTCT	GAAATTCAAA	AGACTGAAAC	AGATCTTCTT	240
TTTATCAAAT	AAGTTGATTG	CAGAGATTAT	ATTGGTGTTT	ACATTTTCAGG	CAACCTGCTC	300
ATGAAATTAT	CCATTGCTCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC	AAAGAGGCCT	ACTCCTCCGC	CTGCAACCAT	TGTTTCCTAC	CACTGGATTA	60
TTCTGAAGCA	AATTTTAGAC	ATCATATATA	TTTATCTCTG	AAAGAGGACT	CTTAAAAACA	120
TGCACTTATA	CCTCTATTAC	ACTGACAAAA	TTGGTAACAA	TTCTTTTATA	TTATCAAATT	180
TCCTTATTGA	GTTCTGTATG	TTCAAATTTC	TGATTCTCCA	GATGCTCCAA	ACTTCCAGAA	240
ACACAGATTC	CCAGATGGAA	TCCTGGGGAA	GGCTCGAG			278

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAATTCGGCC	AAAGAGGCCT	ATTTTCTAAT	AAAACTATT	TTATGGTAGG	TTTTGTGGAT	60
TATTGAATAC	AATCTGGCAT	TCTGTTTAAT	ATGTATGTTT	TCCTGAATGA	GGGGGTACAT	120
TGTAATTTTA	ATTATTAAAC	TCACAATGTT	TTTGGTTTTA	AAAATAAAAA	TTTTAGGAGC	180
AAGCAGTGTT	CCTGCCTTCT	TTTCTGAAGA	TGATTCTCAA	TCGAATGACT	CAAGTGATTG	240
TGATAGCAGT	AGTAGTCAGA	GTGACGACAT	AGAACAGGAG	ACCTTTATGC	TTGATGAGCC	300
ATTAGAAAGA	ACCACAAATA	GCTCCCATGC	CAATGGTGCT	GCCCAAGCTC	CCCGTTCAAT	360
GCAGTGGGCT	GTCCGCAACA	CCCAGCATCA	GCGAGCAGCC	AGTACAGCCC	CTTCCAGTAC	420
ATCTACACCA	GCAGCACTCC	ACCTCGAG				448

(2) INFORMATION FOR SEQ ID NO:199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 187 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC	AAAGAGGCCT	AACTTTTGTA	ATTGGAATTG	GGTCCCGCTT	AGTTCTTGAA	60
TTGTTATGAA	AATCCTATAT	CTGTTTGTAT	ATTTGCAAAC	CCTTTGTATT	ATAATTGTTG	120
ATATTTTCCC	TTTTTAAAAA	ATACCATTGA	AATCAGCATG	ACAAAAATAA	CACTGTGGGC	180
ACTCGAG						187

(2) INFORMATION FOR SEQ ID NO:200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

GAATTCGGCC	AAAGAGGCCT	AGACCAGAAT	AAGCCTTTTA	AGGTAAACCT	CAAAATTATC	60
ATTTTATGGT	AATACTGACC	ATTTTAGTCC	CCTAGGTTTG	ACATGGGAGA	TAGTGACTAC	120
ACTGGTGTCT	GACTTTTTTC	CTAGAGATT	CTCCCTGAAA	AATACAAGGG	CTGTTGGTGA	180
GAGCAGACTT	GAGGTGATGA	TAGTTGGCCT	CTGGTCTACA	AAGATTTTCAT	AATCCTTGG	240
AAAGCTTCTT	ATAATCATT	TTAATTCTT	GGTAGCTAGA	AATTAGAGT	AGTTGAAATC	300
TTTAGGAATG	AACTTCTGAG	GGCCAAAAA	TGTGACTGAC	ACACTCGAG		349

(2) INFORMATION FOR SEQ ID NO:201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

GAATTCGGCC	TTCATGGCCT	ACATCACCAA	TTCGGCTGGG	TAAGGGTCCC	CATGAAGGCG	60
CAGCCCGGTA	TAGAGGTGCA	GGGGAGAGCA	GCCTGGGGAG	TCCCTATCTG	GATAGGCTCC	120
AGCCTGGGTC	GGGGCGGTCC	TGGTGCCCGG	TGAAGCGTCA	AAAGAGGGAG	CCTGAGCGGG	180
GCAACGCAGA	AGGGTGGAGA	GGAGGGGGTG	GCGAGGGCGG	GCAGCGAGGC	CTGGAGCCGC	240
CAGGAGAGGG	GCGGGGGGCG	GCCCTTCTCC	AGGAATTTC	GGGGATCGTG	TTACAGCGTT	300
GGCGGAGCCC	GAGCGGAGTG	GGACTCGAG				329

(2) INFORMATION FOR SEQ ID NO:202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

GAATTCGGCC	TTCATGGCCT	AGAAAGGGGA	GGGAACGTGA	CAGGCAGGTG	TGGGATAGGG	60
ACTTCTCTTC	CGGTCAGAGC	AAGGGTCGTC	CGAAACCAAA	ACAACCCTCT	TCCCTTCATC	120
TCGCCCCGGA	TCCAAAGTCT	TGGGGCTAGG	CTGGGGCGGG	AGTGGCACGG	AGATGTAGGA	180
ACACTGCCTT	TCGTACTTTC	TCCTGCCATG	GCTGACCTTT	TTGTCTCTTG	TTTCATGGTT	240
TTACACGTAT	GAATGGCTTG	AGACTGAGGA	TTTAGGGAAG	AAGCGAAGGC	ATCATCTAGG	300
GCTGTGCTGT	GCCAAGTTGA	GCAGTTGTTT	AAACTGTTAG	AATTTTGTAC	TGGTGTAATA	360
ACCCTCTATG	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCGGCC	TTCAAGGCCT	ACGTGAAACC	CCATCGGCTT	CATTGGCTCC	TTGATTAA	60
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CCACGCCCCG	CTNTCTGCCC	TCTTTGATGC	TGCTGGGCCA	GGTTGCCCAG	CCATATCCCA	120
GCCCCGTCTG	CAGGGAGCCG	GAGGCGCTG	CTGCTGCTAT	TGTGTGGATG	CCGCGCGTGT	180
CTTCTCTTCT	TTCCAGAGAT	GGCTAACAGG	GGCCCAGCT	ATGGCTTAAG	CCGAGAGGTG	240
CAGGAGAAGA	TCGAGCAGAA	GATCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 197 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC	TTCATGGCCT	AGATGTGTTG	AACCTTATTC	TTGTACATTC	ATTCAATCAA	60
GGCAAACTTT	TATAATTTTT	CTTTTGTTTC	CAATGACCTT	GAAATGTTAT	AGCATGGTAA	120
TATTCTATGC	AACATAGTTC	ATACTTTTTC	GTTTGACACT	GTATTTTTC	ACATTGATTT	180
ACTGGTTGAG	GCTCGAG					197

(2) INFORMATION FOR SEQ ID NO:205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCGGCC	TTCATGGCCT	AGCAAGACCT	TTTAAGTATA	TACTCTGAAA	GTGTGGCTAA	60
TATGATCATG	ATGCTGTAGG	AAAAAAAGGT	TATATGTCCA	AGTGTATGTA	CTGTAAATG	120
TGCCTAAAGA	AACCTGGAAG	GATACACAGG	TCTTCCCTGG	GGTACAAGAC	GGAGAAGTGG	180
GATCATCATC	TTAACTCTAC	TCTTCCTTTT	TACTCTTCTG	TCCTCTTAGA	GACTTTTGCC	240
TGTATACATG	GATTACTGTT	ACTTAGCAGG	GGCGACCGGT	TGGCCAAAGC	CTTGGTGTGC	300
CCTTGGCACA	ATTCTGCCAA	GACCCCTACC	CTCTCCTCTC	CTCANGGCTC	CCTTAACCCC	360
TCTCCCCACA	TCTGGAAAAC	CCTGGATACA	TTTTCT			396

(2) INFORMATION FOR SEQ ID NO:206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

GAATTCGGCC	TTCATGGCCT	AGGAAGAGGT	TGAGAAGACT	CCTGGGCTTC	AGCCTCTCCC	60
ACCCAGCCCT	GCCCCCACC	TGCCTGCCCT	CCCCTCCCCC	ACTCTATACT	AGGGACTGGA	120
TCTCAGCCTC	TGATCAGTTT	CACAAAGTTT	GTTCCCTAAG	GAAATCAAAT	CCCATTGTCA	180
CCTAACTCTG	AAGATCTAAA	TAGCCCTTGG	ATCAGTACGG	GAACCCCAAA	TCCCACAGGG	240
CCAGATGTGG	AGTCTGTGTC	TGCCCCCGTC	TTCTCTCCAT	CCTCAAAGCC	CCCCTTCTC	300

TCCAGGCTGC TTCTCGAG

318

(2) INFORMATION FOR SEQ ID NO:207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

GAATTCTAGA TCCTGCCCTC GGAACAATGG GACTCGGCGC GCGAGGTGCT TGGGCCGCGC	60
TGCTCCTGGG GACGCTGCAG GTGCTAGCGC TGCTGGGGGC CGCCCATGAA AGCGCAGCCA	120
TGGCGGCATC TGCAACATA GAGAATTCTG GGCTTCCACA CAACTCCAGT GCTAACTCAA	180
CAGAGACTCT CCAACATGTG CCTTCTGACC ATACAAATGA AACTCCAAC AGTACTGTGA	240
AACCACCAAC TTCAGTTGCC TCAGACTCCA GTAATACAAC GGTCAACCACC CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

GAATTCGGCC TTCATGGCCT AGTCTCTTGA AAAGCCGCAT TTCCAGGCGC TTGGCCAGTG	60
GCCTGGGAAG TAGCCTGTGC TTGTATTGAG ACAGTCCCCC AGCAGCAAAC CATGTTCCAG	120
TCATTCCCTT TCCTACTTTG GGGATTGTTG CCTTTCTGCT TGTTTTAAAG TAAAACAAGC	180
ATGTACTTGT TTGTATGTAT GTATGTATGT AGTTGTACGG TGGGCACAAA TAAAAGAGG	240
GCTGTATCCA AATAAATCAT TTCTGGCTGC TCACTGGCAC AGTCCCTTTG CTCGCTCCC	300
TCCTGGCTCG AG	312

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

GAATTCGGCC TTCATGGCCT AGGCAGCGTT TCACCGCTGT GGAGGACCAG TATTACTGCG	60
TGGATTGCTA CAAGAACTTT GTGGCCAAGA AGTGTGCTGG ATGCAAGAAC CCCATCACTG	120
GGAAAAGGAC TGTGTCAAGA GTGAGCCACC CAGTCTCTAA AGCTAGGAAG CCCCAGTGT	180
GCCACGGGAA ACGCTTGCCT CTCACCTGT TTCCAGCGC CAACCTCCGG GGCAGGCATC	240
CGGGTGGAGA GAGGACTTGT CCCTCGTGGG TGGTGGTTCT TTATAGAAAA AATCGAAGCT	300
TAGCAGCTCC TCGAG	315

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```

GAATTCGGCC AAAGAGGCCT AGGAAGATGG CGAAGGTCTC AGAGCTTTAC GATGTCACTT      60
GGGAAGAAAT GAGAGATAAA ATGAGAAAAT GGAGAGAAGA AAACCTCAAGA AATAGTGAGC      120
AAATTGTGGA AGTTGGAGAA GAATTAATTA ATGAATATGC TTCTAAGCTG GGAGATGATA      180
TTTGGATCAT ATATGAACAG GTGATGATTG CAGCACTAGA CTATGGTCGG GATGACTTGG      240
CATTGTTTTG TCTTCAAGAG CTGAGAAGAC AGTTCCTGG CAGTCACAGA GTCAAGCGAT      300
TAACAGGCAT GAGATTTGAA GCCATGGAAA GATATGATGA TGCTATACAG CTATATGATA      360
GGATTTTACA AGAAGATCCA ACTAACACTG CTGCAAGAAA GCGTAAGATT GCCATTCGAA      420
AAGCCAGGG GAAAAATGTG GAGGCCATTC GGGAGCTGAA TGAGTATCTG GAACAATTTG      480
TTGGAGACCA AGAAGCCTGG CATGAACTTG CACTCGAG      518

```

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTT CATTTCCTTT GTAGACTAAT GTTACAATAA      60
ATAAATGGGA ATTTTAAATA CCTGCATGTT CTGTTTTTCT CTTTTTCTT TTTTCAGCCA      120
TAATGAAAGG AAAGTGACCT GCAAACATCC AGTCACAGGA CAACCATCAC AGGACAATTG      180
TATTTTGTGA GTGAATGAAC AGACTGTTGC AACCATGACA TCTGAAGAAA AGAAGGAACG      240
GCCAATAAGT ATGATAAATG AAGCTTCTAA CTATAACGTG ACTTCAGATT ATGCAGTGCA      300
TCCAATGAGC CCTGTAGGCA GAACTTCACG AGCTTCAAAA AAAGTTCATA ATTTTGGAAA      360
GAGGTCAAAT TCAATTAAAA GGAATCCTAA TGCACCGGGC GATCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

```

GAATTCGGCC AAAGAGGCCT AGTACAGTCC CAATCAAGAA GCCTTATTAA CCTTCTGTGT      60
GAGGGACTAG ACTCAGTGTT GGGTTTGGAG GATCCACTGG TGAGGAGCAT TCACTCTAGC      120
AGGAGAAAATG TCAGCATTAT TTATTACACA ACAAGATCTG ATGCATTGAG ATGTACTTAC      180
AGGTCTAGGA ACTGTTTCTG GAGACACAAA TGAATGAGAG AGAGAGGGAG AGAGGGGAGAT      240
TGAGTGAGTT AGAGAGTTGT TGGTGCTCCA CAAGGAGCAG TAAAGTATTT TAAAAATAAA      300
AAATAATAAG GCTGACTCTG TGTCTGCCT AGGGGTTGGC CATGCTCCAC AAAAAGCAGT      360
AAAGTGTTTT TTGTTTTGTT TCGTTTTTTT TTAAAGACA GACGTCTCGA G      411

```

(2) INFORMATION FOR SEQ ID NO:213:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 339 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

```
GAATTCNGCC AAAGAGGCCT AGTTTATCT TCTTACCTAT TTACTGAATG CNACATTACT    60
GCACACCAAG ACAAAGAGC TCTCCAGGAA AACATTGGAT ATATTGAGAG CATTAAAAGA    120
TACTGCAAAA GCTCTAATAA ATTCAGTCTG CTTATTTTCC AAATTCATA AACTACATAC    180
TTAGGAAACT GTGCTTTCAG TGAGCTAAAC TTCTTTTTTT AAGTAACTAT CATAGTTTTA    240
AGAAAAACAT TTTAAGAAGA CAAAAAGTAT TTATTAAGCC CATCTAAAAG GCTAATGCAA    300
ATTCCCAAAA AAGGAGCACA TAGAGATAGG CATCTCGAG                          339
```

(2) INFORMATION FOR SEQ ID NO:214:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

```
GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCCT CGAGACACTA GCCCTTTTTT    60
CTGTTGGTTT AGCACAATA CTTCCCTCCT CCGGCACCTC CAAACCTACC CCACAGTCAG    120
TGTAATTGTT TTATATATAT TTAATCTTAT TCAATGGAAA CCATGCTTTT GTCGTTTTAT    180
ACTTTGCTAG GTAGACTTCT CGAG                                          204
```

(2) INFORMATION FOR SEQ ID NO:215:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

```
CTCGAGAGGC GCATCTTCAC TGGCATATGA CAGGCTGTCA CTGCAGCTAA TGTGTTGACA    60
GTTTTTCCAA AGACCTACTG ATGCATCTAC CGTATTGGAA ACCAACCAGA CATTGGCAAT    120
GGTGCTAACA AATAGCATAA TAACAGTAGC GATGTGGACC ACAAAGATAC CAGCCAGCAA    180
TACCAACATG TTGGCTCTTT TTTTITTTGGT AACTTGTGAG CAAAGAGAGT TCTGAAGGGT    240
CCCAGCGACA GAGGCACTCG AGGCAGGTCT AGAATTCAT TAGGCCTCTT TGGCCGAATT    300
C                                                                    301
```

(2) INFORMATION FOR SEQ ID NO:216:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

GAATTCGGCC	AAAGAGGCCT	AAAATATTTG	AGTCTAAACT	TATAAATTTT	GCATTCTCCC	60
TAACGAAAAA	ATTTCTATTA	CTGTGGTGGA	TTTCTTTAAA	TTTGAAATAT	AGTTACTGAA	120
ATATTAATTC	TTTCAATTAA	ATTTATATTT	ACTCACTGGT	TCCTTCCCCT	TCITTAAGGA	180
GACAGAAAAC	ATTAACACTT	TTTAACCTCT	CATTGTGTTA	AAAATTTATT	GACCTCTCCT	240
CTGAGACAGT	TTGTATTCTT	AGATCTCTTT	AAACATAAAT	ATGCTTATTT	TCAAGTTTTT	300
GTCACAGTAT	TCACTCGAG					319

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 278 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

GAATTCGGCC	AANGAGGCCT	ATTTAGATTT	AACCCAGTTT	GTAGACATTT	GCATAGATCA	60
AGCAAAACTA	GAAGAGTTTG	AAGAGAAAGC	ATCAGAACTT	TACAAGAAAT	TTGAAAAGA	120
GTTTACCGAC	CACCAAGAAA	CTCAGGCTGA	ATTGCAGAAA	AAAGAGGCAA	AGATTAATGA	180
GCTTCAAGCA	GAGCTACAAG	CTTTAAGTC	TCAGTTTGGT	GCCTTGCCAG	CTGATTGTAA	240
TATTCCTTTG	CCTCCCTCTA	AAGAAGGTGG	AACTCGAG			278

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 298 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

GAATTCGGCC	AAAGAGGCCT	ACCTGGCTCA	TTTATAACCT	CCTCGATCCT	ATTACTGATT	60
TGCATTCTTA	ACTACAGGTA	AGAGAAAACC	AGTGCAACCT	AGCTTTCAAT	AGACAGGAAT	120
TTGCTGGCTC	ATATAAATGA	GACATCCAAT	AAAGAAGAAA	AGTTGGAAAA	AATGTGTCAA	180
ATGTAGCATC	CTCTCTCTCT	CTTCTCTCT	CTCTCTGTTT	TTTACCTAG	GCTTGTGCCA	240
TAAACCTGCT	TCTACATCAG	TTACTGTGGT	TATGGGCGTC	TTGTTGGCTG	AGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

GAATTCGGCC AAAGAGGCCT ACTTAGCAGA ATATATTCTT TAATAGCTCC CATAAAGCAA	60
ACAAACCCAA AATATATTCT CTGACCCTA CATTCACTTC CAACTATCAC CCTACATCTA	120
CATTCTCCTT TTCATACCAA ACTTTTCCA AGCAGTTGTC TATATTATG TCTCCACTTC	180
TTTACCTCCT ATTCTTGCTT CAGTATGCTT CAGTTGAGCT TCGTCCCCCT GTAGTCCACC	240
ACCAACTCGA G	251

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

GAATTCGGCC AAAGAGGCCT AGATTGATTC TGTGTTGTGG TATTGGCCCT TACATACAAC	60
TGGAGGAAGT GTGAATTTCA TCATGTTGAT AAATGGGACT GTCATGATTC TTTATAATTA	120
CTTCAATGCC ATGTTTGTGCG GTCCGGGCTT TGTCCCTCTG GGGTGGAAC CGATGTGTGA	180
TGAAGATGGA CCATCACTGT CCTTGGATCA ACAACTGTTG TGGTTACCAA AATCATGCTT	240
CGTTCACACT GTTCTCCTT TTAGCACCAC TGGGTTGTAT CCATGCTGCT TTCATTTTGT	300
TGATGACTAT GTACACACAG CTTTATCATC GGCTCTCCTT TGGGTGGAAC ACAGTGAAGA	360
TCGACATGAG TGCAGCACCC TCGAG	385

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

GAATTCGGCC AAAGAGGCNT ACCCNGATTA TAGTTTTTGT ATTGTTTTTA CAATTTTTGT	60
GAATTAGGAT CCAAATAAGG TCTGTAAATA TTACATTGGG TTTAGGTAAT CGATACTTTT	120
TTTCTTTTAA TCTATAAGTT TTCCTCTATC TTTTATTGT GGTATTCCC ATACAATTGG	180
TTTGTTGAAG AAGCCAGGTC TTTGCCCTAT AATACTTCTC AGAATCTAGA TTGTGTTGAT	240
GAGATCCCAG TGGTTTCATG TAATATGTTT TTTGTCCCT TGTATTTTCT GTAAATTTTG	300
TTTATTTTAT TTTTTTATT TCTATTATT GAGATGGAGT CTGCACTGT CACCCAGGCT	360
AGAGTACAGT GGCATGATCT CAACTCACCG CAACCTCGAG	400

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

```

GAATTCGGCC AAAGAGGCCT AAGAGCCTAT AAGGTTTACA TATTCTACTG GAGAGAGAAA    60
TAGGGACATA CAATAAATGA TTTTATAATA AATTTCATG AAAAGTGAAT CTGAAAACCC    120
CACCGGAAGG CAGAGTAGTG CAGCCAAAGG AGCATGAATT GTGGAATCAT ACAGCTCTAG    180
GTTGAGATCC TACCTTTACC ACTTGATAGC TAGGCAGACT TCAACAAGTT AGTCTAATTT    240
GAGCTTCAGT TCTCTCATCT GTGAAAAAGA GAAAATACAG CCACTTTATA ACATTATTTT    300
AGATGCCATA AGGTAGGTAA AGTGCCAGAC ACATAGATTC AAAAATCTCA ATAAATAGG    360
AAGGCTGGAA TTTCCAAAAT TTTTCTTGC TTTCACAATC TGGGTTCTAA ATTTATTATT    420
ACTCTACCCA TCACTTCTCT CTTCTCCCTC CACAACCTCA CTATAAGCCC AACATCTCGA    480
G

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(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

```

GAATTCGGCC AAAGAGGCCT AGTGTCTGT AGAGGTCTCA GCATTCTCT TAGTATTGTA    60
CTGTATTAGT TTTACATATT TCTTCTTTG TTTAGAGTAT AACCGCTTCT TACATTTCCT    120
TCAGTCGTTT TCTAAAGAAG AAATTAATCT TTTTAGAAAT CCTGGCAGTT ACCCGCAAT    180
TGATGTTTTG GTGGAAAATT AGAGCACACC AGTTTGTCT AACTTTAAGA AACATTTTCA    240
CTTTATTGAT ATTCTGAGGA TTTTAGTGAT TTGGGTAATT TGGGTCTAAT AAAGAGTAAA    300
TTGTTGAATA CTCATTTGTT TTGAGTCATC TATATTTTTA AACCTTTCT TTAGTTGTTT    360
TTTCATCCCT AATACAAATG CAACTTTCCC ACTTGCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

```

GAATTCGGCC AAAGAGGCCT AAATGATGT CTTCCATTG CTGGATAGGA CATGCTGACT    60
GATGACCTCA CAGACTGTTT TTATGCCCTC ACTACTCACC TCACCACCTA CAGTCATAGG    120
CTGACTAGGA GTTGGTTGTG TACATTCCTA AACCTTTTGG CCCTCTTTAT TTGTCTTTCT    180
AAGTGTGTAT TCAGTACTAT GTAAATTGAT AAAACATGAG TGTGAAAATA TTTTCTTTTG    240
CTATAAAAAT GTAAATTGAA TTCTTTGGGG AAGAGCTGAT AAAATATGTC ACTTAAAGAT    300
CTTGTTAAAT TAGATGAGGG AGATATAGAT GACAGAAACT CTTTCAACAA ATATCTAAAA    360
AGATGTGCCA CTCCAATTAT TTTGTGAGTG TCTTCAAGTT TTTGTCCCAC TTTAAAGAAA    420
ACCAAACCTGG CCATCATAGC CAATGAATTA TGCAGGAGTC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

GAATTCGGCC	AAAGAGGCCT	ACACATTATA	TTAGATTTC	TAGAACTGT	TGGAATATC	60
TAGCACATGT	GCTTTATCCC	ACAATAATTA	CATAGAAAAT	TAAAAAGAAT	TAATTCTAAT	120
GTAACCATCT	TTTACTTGA	CTTTTTTTT	TTTGCTCTG	CTCACAGGTC	TAATTGTTGT	180
TATTCTCACT	TTATTTTCT	ATAAGGTAGG	AATAATATCC	ACTTCATTAG	CTCATCATGA	240
GGGATAAGTA	GGATTGGAAA	AGATACTTTC	AAAGGGCACC	TAACTGTGAA	GAAGATGCCT	300
TCATTGTCAT	TTCTTTCTTG	GCACATTCT	TGTTATCCAG	TCATTCATTA	GGACTCCATG	360
TTTATTGAAC	ACCTACTCTG	TGCCAGGCAC	TTTTCTCTGT	TCTGGAAATA	TCACCATGTA	420
AAAACAAATA	GCTGAAGAAT	GCCCTGCCCT	CATAGAGCTT	ACAGACATAG	AGCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

GAATTCGGCC	AAAGAGGCCT	AGCGTTTCTG	ACTTTATTAC	TGGTAATTTA	TTGCACAGGT	60
TTTTCTGCAT	CAAAAAAGTA	TCTGCTAAAA	TAGAGAAAGT	TGTGTCTGAA	TTACATTTTC	120
CCCCCAACTT	CTAAAAATAT	TTCCCTTAAA	AAAGAATCCA	CTCATCTAAT	TTTAAAGAAA	180
ATATACTTCT	TACACAAGAC	AATCCAAACT	GATGCAAAAT	ATTATTCCA	AGTTAGTTAT	240
TTTATGCAGT	AGTTTCCCCC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

GAATTCGGCC	AAAGAGAGAA	ATTTTAATCT	TGAAAGACTT	TTCAGGGTAT	CTCATTTTTT	60
AGGTGGGGGT	GGCAGGTGTA	TTCTTTTTT	AACAAATAAA	AGGCATTTAA	GTAAAACTAA	120
AATGAAAAAA	GTAGGCCTTC	TGACATTGTG	TACTTGGTGG	TTCTGTCCCT	CTGCCTGTAA	180
CAATCTCAT	TTTTGTTACC	AAGAACTGTA	TGAAAGAAGT	AAATCCACCC	CTCTCGAG	238

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```

GAATTCGGCC AAAGAGGCCT ATGCCTGTGT TGGGTTGACA GTGAGGGTAA TAATGACTTG      60
TTGGTTGATT GTAGATATTG GGCTGTTAAT TGGTGTGTGA GAATATTTGA GCACAGGTGG      120
AGTAGAAACA AATCACAAGG ACTTTAAGGA GTTGAGGTAT AATGAAAGTC TCACAACTT      180
CAGCTGTGAT GGGAAGAATG GAACCAACAA TGAAGGATC ACTCATGGTT TCAAGTTACA      240
GAGTGCCTAT GAGAGTGGCC TGATGCCTTA CACGAATTAC ACATTTGATT TCAAGGTAT      300
AATAGACTAC ATTTTCTATT CTAAACCTCA GCTGAACACC TTAGGCATCC TGGGCCCTCT      360
GGACCACCAC TGGCTGGTTG AGAATAACAT CAGTGGCTGC CCGCACCCCC TCATCCCCTC      420
TGACCACTTC TCACTTTTTG CACAACCTGA GCTCTTACTG CTTTCCTGTC CCCAAGTCAA      480
CGGCATTCTC GAG                                         493

```

(2) INFORMATION FOR SEQ ID NO:229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```

GAATTCGGCC AAAGAGGCCT AAGAAATCAA AATTAAAGCA ATCAAATAAT ACTCACATTT      60
ATATAAGAAA TACTTCAATT TACTTTCCAA TGAGTAAAGT TTTATATTTA ATGTTTTTAAT      120
ATTTTCATATT TTAGTTTCTT GCAATTATTT ACTTTTTCTA AAACCTACTT AAATTAGGTT      180
TAAAAGTCTA CTATATATAA TTTGAAATTT TATTCAGTTT GCCTACAGGT GTGTTTTAAC      240
CAGTGTGTAC ATAGTATTTA ACGGTCTGCT TTTTTTTTTT TAATATGTTT TCATGTTTGA      300
ACATCTGTAT GTTCATACTT TTCTTGACAA AGTTCTAAAG GTTACTGTGT TGAAGCATAAC      360
TGAACGATTA CTGATAATTT CTATTTTGAG GAACAGGTAT GTCAGTTCTT TCTCTCTGTT      420
TGATAATTCT CTCTTTTCCC CTTAGGAATC CAAAAATCCT TGTGGAGTGT CTTACTCCTG      480
ATTTTCGAGG TGATCTCAAA GCAATAGAAA AAGTTGCTCT GTCAGGATTA GATGTGTATG      540
CACATAATGT AGAAACAGTC CCATTGCTCG AG                                         572

```

(2) INFORMATION FOR SEQ ID NO:230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 193 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```

GAATTCGGCC TTCATGGCCT ATCGAGATAC GCTTTCGCGC ACCAGGTACG CCTGGTGTTT      60
CTTTGTGGTT TTTCGGATTC TTTTGGGGA GTGCGGGGAG TCACAGTTAG AAGGCGGCCG      120
GGTGTGCTG GAGGAAAGTG CTGAGGTCCA GAGCGTAGTC CGAGGGCTCC GAAGTCAGAT      180
TAAAGGGCTC GAG                                         193

```

(2) INFORMATION FOR SEQ ID NO:231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```

GAATTCGGCC TTCATGGCCT ACATAATGAT GCTGCCTCAA AACTCGTGCC ATATTGATTT    60
TGGAAAGATGC TGCTGTCATC AGAACCTTTT CTCTGCTGTG GTAACCTGCA TCCTGCTCCT    120
GAATTCCTGC TTTCTCATCA GCAGTTTTAA TGGAAACAGAT TTGGAGTTGA GGCTGGTCAA    180
TGGAGACGGT CCCTGCTCTG GGACAGTGGA GGTGAAATTC CAGGGACAGT GGGGGACTGT    240
GTGTGATGAT GGGTGGAACA CTACTGCCTC AACTGTCGTG TGCAAACAGC TTGGATGTCC    300
ATTTTCTTT CGCCATGTTT CGTTTGGAC AAGCCGTGAC TAGACATGGA AAAATTGGC    360
TTGATGATGT TTCCTGTTAT GGAAATGAGT CAGCTCTCTG GGAATGTCAA CACCGGGAAT    420
GGGGAAGCCA TAACTGTTAT CATGGAGAAG ATGTTGGTGT GAACTGTTAT GGTGAAGCCA    480
ATCTGGGTTT GAGGCTAGTG GATGAAACA ACTCCTGTTC AGGGAGAGTG GAGGTGAAAT    540
TCCAAGAAAG GTGGGGGACT ATATGTGATG ATGGGTGGAA CTGAATACT GCTGCCGTTA    600
TACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATCGCCT ACAGCGCTGC CTTTCCTTAT GAAGAAGACA CAAACTTGGA    60
TTCTCACTTG CATTATCTT CAGCTGCTCC TATTTAATCC TTTCGTCAA ACTGAAGGGA    120
TCTGCAGGAA TCGTGTGACT AATAATGTAA AAGACGTCAC TAAATTGGTG GCAAATCTTC    180
CAAAGACTA CATGATAACC CTCAAATATG TCCCCGGGAT GGATGTTTTG CCAAGTCATT    240
GTTGGATAAG CGAGATGGTA GTACAATTGT CAGACAGCTT GACTGATCTT CTGGACAAGT    300
TTTCAAATAT TTCTGAAGGC TTGAGTAATT ATTCCATCAT AGACAAACTT GTGAATATAG    360
TGGATGACCT TGTGGAGTGC GTGAAAGAAA ACTCATCTAA GGATCTAAAA AAATCATTCA    420
AGAGCCCAGA ACCCAGGCTC TTTACTCCTG AAGAATTCTT TAGAATTTTT AATAGATCCA    480
TTGATGCCTT CAAGGACTTT GTAGTGGCAA ATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

```

GAATTCGGCC TTCATGGCCT ACCTTGATAC ATCAGCTGAC CTCATTTCCG GATACCTTTT    60
CCCCCCCAGAA AAGTACAACA TCTGGGCCGC CCCAGCCCGA AGACAGATCG TCGCTCCCTG    120
GACAATCAGA CGAATTCTCC CCCCCCCCAG AAAAAAAG CCATCCCCC GCTCGCCCC    180
GTCGCACATT CGGCCCCGCG GACTCGGCCA GAGCGGCGCT GGCAGAGGAG TGTCGGGCAG    240
GAGGGCCAAC GCCCGCTGTT CGGTTTGGCA CACGCAGCAG GGAGGTGGGC GGCAGCGTCG    300
CCGGCTTCCA GACACCAATG GGAATCCCAA TGGGGAAGTC GATGCTGGTG CTTCTCACCT    360
TCTTGGCCTT CGCCTCGTGC TGCAATGCTG CTTACCGCCC CAGTGAGACC CTGTGTCTCG    420
AG

```

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

```

GAATTCGGCC TTCATGGCCT AAGAGATTAA GTGATTACT CAAGGTCATA TTCCTTGGA      60
GTAGCAAAAC TTCTGGACCA GATTTCTGAT TCCAAAGGCG GTACTGCTTG TACAACACTC     120
TGAGAAGTAA TTACTGTGGA GCAAAGCAAA AAGAAGTCTA AAAGCAGGTG ATAGGTGTAG     180
ATTAGATAG  TGTAAGGTA GGCTAAAGTG TTGTAACAAA TGCACCCTCA AGTAGGTAAT     240
GGCTCAACA CAATAGATGT TCACTTCCCA CATCTCAGAG CAAATTGGGT TCTCCTCATC     300
AGCTAAAGCT TTCCTACATG GGATGATTG GGGAGCAAGA CACTCCATCT ATGGCTCCCT     360
TACCCTCCAA GGCCTTCTTA TTGCTTTAT GTAACCAAGT GAAGAGCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGCCT TCATGGCCTA GGCTTCTTCG GAGCTGTGTA NTCTTAATTT GCTTTGCTGC      60
TGGCTGGCTG ACAGCTGATG GGGGACTCCT CANGACGGAC TCCCTTCCAG ATGCACCCAT     120
CTCCATCCTT CTCAACTCCC CAACCTTTGT CCTCCCCACT CTTGCTCGC GCGGCGGTCT     180
GAGACCACCA GGACCACTTT CAGGGGTTTC CTTCTCCAGC GAGACTTGGC AGAACAGGCT     240
TTAAAAGCAA AGGAGGCAGC GGAAGACTGT GAAATTCCTT GGACAATTGA TGATATTAT      300
CATTGTGCCC AGTTTCTACA AATAAAAGAT GGGTGGATTA TTTTCTCGAT GGAGGACAAA     360
ACCTTCAACT GTAGAAGTTC TAGAAAGTAT AGATAAGGAA ATTCAAGCAT TGAAGAATT      420
TAGGGAAAAA AATCAGAGAT TACAAAAATT ATGGGTTGGA AGATTAATTC TGTATTCCTC     480
AGTTCTCTAT CTGTTAATAT GCTTAATTGT ATATTGTGG TATCTTCCTG ATGAATTATC     540
AGCAAGACTT GCCATGACAC TCCCATCTCT CGAG              574

```

(2) INFORMATION FOR SEQ ID NO:236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT AGGCGCGGCC CGGGTTCCTG TCCCCGCGG AGCCATGCGG      60
TACAACGAGA AGGAGCTGCA GGCTCTGTCC CGGCAGCCGG CCGAGATGGC GGCCGAGCTG     120
GGCATGAGGG GCCCCAAGAA GGGCAGCGTG CTGAAGCGGC GGCTGGTGAA GCTGGTGGTG     180
AATTTCTCTT TCTACTTTCG GACAGACGAG GCCGAGCCCG TCGGAGCCCT GCTGCTGGAG     240

```

CGCTGCAGAG TCGTCCGGGA AGAGCCCGGC ACCTTCTCCA TCAGCTTCAT TGAGGACCCT 300
GAGAGGAAGT ATCACTTCGA GTTCAGCTCG AG 332

(2) INFORMATION FOR SEQ ID NO:237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

GAATTCGGCC TTCATGGCCT AATTGCAAGA TCACGGAATC TCCTGAATCA TTAAGAAAAG 60
ATAAAATATC ACAAGCATCT TTAGTGTTAT GTGTATTGAG TAATTCCTTG GAGTTGTATT 120
TATTAAGCTT ACCAGATTTT AAAGGCATAT AAAATGTGGT AAGATATGAG ACACATACTG 180
AAATATCAGT GCAAAGGGAG AATGGTAGTT GAATGGTCAG AAACGAAAAA GCCTCGAG 238

(2) INFORMATION FOR SEQ ID NO:238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

GAATTCGGCC TTCATGGCCT AGAAGCATT TTTGTTATTG TGAAACATTT TTATACTTTC 60
ATTATAATTT GTTGAGCCTA GAGTTGGGCT ATTTGAATAT TTATTATGAT AATCTTTTGG 120
CTAATGGTAA CAGCATATCT TGTTCTAACA AAATTACTGT TAACAGCAAT CGAACTCGAG 180

(2) INFORMATION FOR SEQ ID NO:239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 578 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

GAATTCGGCC TTCATGGCCT ACTGAGATCC AGACCAGCTC CTCCCAGACC TCTCCAGAAG 60
AAGCCATGGG AACCCCTCGT ATCCAGCATT TGCTGATCCT CCTGGTCCTA GGAGCCTCCC 120
TCCTGACCTC GGGCCTAGAG CTGTTTGTG CAAAAGGTCT GTCCATGACT GTGGAAGCAG 180
ATCCAGCCAA TATGTTTAA C TGGACCACAG AGGAAGTGGA GACTTGTGAC AAAGGGGCAC 240
TTTGCCAGGA AACCATACTA ATAATTAAAG CAGGGACTGA GACAGCCATT TTGGCCACGA 300
AGGGCTGCAT CCCGGAAGGG GAGGAGGCCA TAACAATTGT CCAGCACTCT TCACCTCCCG 360
GCCTGATCGT GACCTCCTAC AGTAACTACT GTGAGGATTC CTTCTGTAAT GACAAAGACA 420
GCCTGTCTCA GTTTTGGGAG TTCAGTGAGA CCACAGCTTC CACTGTGTCA ACAACCCTCC 480
ATTGTCCAAC CTGTGTGGCT TTGGGGACCT GTTTCAGTGC TCCTTCTCTT CCCTGTCCCA 540
ATGGTACAAC TCGATGCTAT CAAGGAAAAC CTCTCGAG 578

(2) INFORMATION FOR SEQ ID NO:240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

```

GAATTCGGCC TTCATGGCCT ACATGAATCC ACTCCTGATC CTTACCTTTG TGGCAGCTGC      60
TCTTGCTGCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACAAC GTGAGGAGAA      120
TTCTGTCCCC TACCAGGTGT CCCTGAATTC TGGCTACCAC TTCTGTGGTG GCTCCCTCAT      180
CAACGAACAG TGGGTGGTAT CAGCAGGCCA CTGCTACAAG TCCCGCATCC AGGTGAGACT      240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAGCAG TTCATCAATG CAGCCAAGAT      300
CATCCGCCAC CCCCAATCG ACAGGAGACT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

```

GAATTCGGCC TTCATGGCCT AGGGCACCAC TGAGTTCAGT ACTTCAAAT TGCCGTGCTC      60
TACCTCTCCC CAGTGACAA AAACACTCTC CACACCAAGC TGCTGTGCT GGGGGATGGA      120
GGGATGGCGT CAGCGATTCA AGACTGTTT TCCTACCTGT TCAGCACTTC TTTCAGCGAT      180
ATGAAGTTAA ATCCAGTCTT TCCCTGTCTC CAGGCATCAT CGCCATCAAC ATACAGCCAT      240
ACTCCAGGAT TGCCCATCTT CAACATAAAC GGACTCTCCT GGACTCCACT TCCCACATCA      300
GTCACAGCCA CACTTCCTGA GAAAGAAGTC TACACTCTTC ATTCACTTTC ATTCACCCAC      360
TGCTCGAG                                     368

```

(2) INFORMATION FOR SEQ ID NO:242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

```

GAATTCGGCC TTCATGGCCT AGAGAAAATA AAGAGTTATA TCAGAAATTT ACAAACATAA      60
CTTTTAAAT TTAAATTGC AAAATATATA TCATACGAAA ATGAAAATTA TAATTCTTCT      120
TGGATTCCCTG GGAGCCACAT TGTCAGCCCC ACTTATCCCA CAGCCTCTCA TGTCTGCCAG      180
CAATAGCAAT GAGTTACTTC TTAATCTTAA TAATGGTCAA CTTTGGCCAC TACAACTTCA      240
GGGCCCACTT AATTCATGGA TTCCACCTTT CTCTGGAATT TTACAACAGC AGCAGCAGGC      300
TCAAATTTCA GGAATCTCCC AGTTCTCTTT ATCAGCTCTA GACCAGTTTG CTGGACTGCT      360
CCCAAATCAG ATACCCTTAA CAGGAGAGGC CAGTTTGGCC CAAGGAGCCC AGGCAGGCCA      420
AGTTGATCCC TTACAGCTTC AAACACCGCC TCAGACACAA CCAGGCCAC GTCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

```

GAATTCGGCC TTCATGGCCT ACTTACAGAA CCTATTCCT GGAAGGAAG CCCTCATTAT      60
AATGATTTTC ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTCAG AAGAGGATTA      120
TTATACACCA CAAAAGGTGG ATGTTCCCAA GGCCTTGATT ATTGTTGCAG TTCAATGTGG      180
CTGTGATGGG ACATTCTGTG TGACCCAGTC AGGCAAAGTG CTGGCCTGTG GACTCAATGA      240
ATTCAATAAG CTGGGTCTGA ATCAGTGCAT GTCGGGAATT ATCAACCATG AAGCATACCA      300
TGAAGTCCCC TACACAACGT CCTTTACCTT GGCCAAACAG TTGTCCTTTT ATAAGATCCG      360
TACCATTGCC CCAGGCAAGA CTCACACAGC TGCTATTGAT GAGCGAGGCC GGCTGCTGAC      420
CTTTGGCTGC AACAAAGTGTG GGCAGCTGGG CGTTGGGAAC TACAAGAAGC GTCTGGGAAT      480
CAACCTCGAG                                     490

```

(2) INFORMATION FOR SEQ ID NO:244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

```

GAATTCGGCC TTCATGGCCT AGAAAAAAGA AACTGTCGTG GATACTGTCA GTGTATATAT      60
TTATGTGGTA CCTGAGAGCC ACCCCAAATT AGATTGACTT TAGATCGTTT ATACAAAAAT      120
AGCTTGAAGA ACTGTTTTTT CCATGGTAAA TGCTTTTGAA TATTAACCTA GTTATGTTAG      180
ATTCTTACCT CAGTGGTACT GTCACAGCCA TTGGTTACAT TTCTGAAACC CTTGAGAGTA      240
AGAGTTTTGG TTTTTTGTG TGTGTTGTTT TGTGTTTGA GATGGAGTCT TGCTCTGTCG      300
CCCAGGCTGG AGTGCACTGC AGCAACCCAG GTGGAGTGCA GTGCAACCTC CACCTCCAG      360
GTTTAAGCGA TCCTCCTAAC CTCGAG                                     386

```

(2) INFORMATION FOR SEQ ID NO:245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

```

GAATTCGGCC TTCATGGCCT AGCTTCAGTA GCAAATAAGG ACATCATCTG CTATAACCTA      60
CAAGCAGTTG GACAGATATT CTACATTTCC TCATTTCTCT ACACCGTCAA TTACATCTGG      120
TATTTGTACA CAGAGCTGAG GATGAAACAC ACCCAGAGTG GACAGAGCAC ATCTCCACTG      180
GTGATAGATT ATACTGTGCG AGTTGGTCAA ATGGCCTTTG TTTTCTCAAG CCTGATACCT      240
CTGCTATTGA TGACACCTGT ATTCTGTCTG GGAATACTA GTGAATGTTT CCAAAATTC      300

```

AGTCAGAGCC ACAAGTGTAT CTTGATGCAC TCACCACCAT CAGCCATGGC TGAACCTCCA 360
CCTTCTGCCA ACACATCTGT CTGTAGCACA CTCGAG 396

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCGGCC TTCATGGCCT ACACCTTTCA CTTATCTTAT AGTCACTTAA TTCCTCTACT 60
CTTATCATTT GATATTTTCA TTTTATGTG TATCTCTGTN NGGCCAAATC AATAGATTTT 120
GAACAATCTC AACTTTAACC TTTTAAAAAA ATCTAATAGG CCCAGTTTCC TCTCAACAAT 180
CTTTGAAGAA CCTTCGAGAA AGGAGAAACA CAGACCTCCC GCTTCTAGAC ATGCACACTG 240
TAACCCGGGA AGAGGGGAGAA GGCATGGAGA CAACTGATAC GGAGTCTGTG TCTTCCGCCA 300
GCACATACAC ACAGTCTTTA GAGCAGCTGC TTAACCTCTCC CGAAACTAAA CTTGGTATGT 360
TACTCTGTCT AAATATGTTT TTCTTATTTA ATTTCACTGT CTTATTAAAT TACTANTACT 420
CTAAGTTACA TATGCTTTTT NGGGCTGCTC CAATAAAATT TCTTTCAATA TTCCACTACC 480
TGTTTGATT AGGTTCTCTA GAGGGACACT CGAG 514

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCGGCT TCATGGCCTA GGTTTTCTGT ACATGGAGAT TAACTGTCT TCCAAAGTGA 60
AGAGTTTATT GTTCTAGATC TTGAGCACAA AGTTGGTAT ACGTTAATAA AAAAAATAGC 120
AAGGGAAGAA AATCATTTCC TTCATACCAA GTAAGAGAGC ACTTATCATG GTAGGCACTG 180
GCTTTGCAAT TATGAGACCA GTAGTAGAAA TAGCTTTAGT TTCCTCAATT TTCCTGGAGT 240
ATTCTTCAGA CTTTCTTTAC ACTGCTCAAG GTGGGGCGAG TGGCAGGGCG GACCCTGGCG 300
ACCTGACGCT GCGGAGGCTC GAG 323

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

GAATTCGGCC TTCATGGCCT AGGAACAGTG TGTGTTTTTG TGTGTGGCTT GCATTCTCTC 60
CTCCGTTTTT GGAGCAGCGT GAGATTATTG CAATGCTACA TTTCTCCCT CTGCGCCCTC 120
CTACCCCATC AATGTCTCAT GGGTGGTGTG ATAGAGGCTA TGGGAGTGAA GACCACTGGT 180

GTTAGTCTGT GTATAGTTCC TGGGGTGTGG CGAGTACCAG CTCTGACAGC GGAAGAGAAC	240
TATACTGTTG ATTCCCATTA TTCTCAGTAG GTGTGTTCTA TAAAATTGCT GCGAACACCA	300
AATTAGCGAA TCCTGAACCA TCGTCCCAG AGGAATAGGG GGTTAGGGTC CTGTGATCCT	360
CAAGTTGCAA CATTGTCTTC GACTGATTAA TATGTAACCT TGTTTATAT GTGCAATCTC	420
GAG	423

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

GAATTCGGCC TTCATGGCCT ACCGAAACCA AATAATTCAA GCACTGCTTA TTACAATTTT	60
ACTGGGTCTC TATTTTACCC TCCTACAAGC CTCAGAGTAC TTCGAGTCTC CCTTCACCTC	120
CGAG	124

(2) INFORMATION FOR SEQ ID NO:250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

GAATTCGGCC TTCATGGCCT ACATCTATGA CTTTTTAAAC ATGCGGCGTT TTGTGAATAT	60
CATGATAATA ACAAGAGTCA ACAGGCTAAG TGAGAGGAGA GGGATGCTAC GCCTACGCTG	120
CCCCCACCAC GGCCAGCCCG CTTCTGCGCC TTGTTGTTG GATTTTCTTT GTGATTTTAC	180
GGGGTTTTGT GTTTTTTTT TCTTGTCTTT TGTTTTGTTA TTTTCTTTG TCCACITGAT	240
TTGCATGCAA CACCACAAA AAGGAAACAC AAAACCCCGT CTGCTCGAG	289

(2) INFORMATION FOR SEQ ID NO:251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

GAATTCGGCC TTCATGGCCT ACACTATGAG AGGACCGATT GTATTGCACA TTTGTCTGGC	60
TTTCTGTAGC CTTCTGCTTT TTCAGCGTTG CCACACAATG TCTGGCCTTC CCCAAAATAG	120
AAAGGAGGAG GGAGATAGCA CATGTTTCATG CGGAAAAAGG GCAGTCCGAT AAGATGAACA	180
CCGATGACCT AGAAAAATAGC TCTGTTACCT CAAAGCAGAC TCCCCAAGTGT GTGGTCTCTG	240
AAGATCCAAT GATGATGTCA GCAGTACCAT CGGCAACATC ATTAATAATA GCAAACTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```

GAATTCGGCC AAAGAGGCCT ATTTTTTTTT CTGCAAACAC TGTGTATAGT GAGACTTGTT      60
CTACTTTGGA GAACAGGTGA CCTTTTGAAA ATGAGGTTGA GTTCTTCCT TTCTGATGCA      120
TTGATTTTGG AAGATTTTTT TTTCCCCCTT CCCCTCTCCC TCGAG                      165

```

(2) INFORMATION FOR SEQ ID NO:253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```

GAATTCGGCC AAAGAGGCCT AGCTTCTTTG TATAATTAAA TCTGAGTTTT GTTTGAGCAT      60
CTTTCAACAT GTACCATATT TATGACAATT CTCTTCCATA GGATCTATCT GTTCTGCAAC      120
AAGTATTGAT CTTACAGTAA AATTTTTCAC AAATTCATTA GATTCTATGT CTCTTTTTCT      180
GGTAGGAATT TTTGTGCAGG TAGCTATCTC TTGCCCTAGA TTATTCTCCT TGTTTAGCTG      240
CTGATTCTTA AACTGGCCTC TAGATTCCA GATTCTTCC GGTACAGACT TTCTCTTTGC      300
AAGTTCTTCC ATCTCTAATC TTTGAGATTA ATCTTCTTTT GAAATGTCCT GCTGCTCTAC      360
TCTTGATGTT CTCGAG                      376

```

(2) INFORMATION FOR SEQ ID NO:254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

```

TCTCCAAGGG AAAATAAATG CTTTACTAT CTAGTTTGTC TCTTTGAGAA TTAAACTCT      60
TTTTTTTTTT TTTCAATCCA GTAGCTTTTG GGGTAGAGTT TGGCTCTTTG AGAATTGCAT      120
ACTAATTAAT TTTAGGGGTG ATTTGTACAT CATCTCTATA TTCCTGAAAC ACAGTAGAAA      180
CAGCCAGCAG TCAGGCAACC ATCTACCATG ACCATTAAAA CATCCCCAAA GTGAAACACC      240
AGATGTGATC TGCTAGATTG AGTGGAGGCG GCTGGCTCGA G                      281

```

(2) INFORMATION FOR SEQ ID NO:255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

GAATTCGGCC	AAAGAGGCCT	AGCTAGNCTT	GCTCAGCTTT	GTGGATACGC	GGACTTTGTT	60
GCTGCTTGCA	GTAACCTTAT	GCCTAGCAAC	ATGCCAATCT	TTACAAGAGG	AAACTGTAAG	120
AAAGGGCCCA	NCCGAGATA	GAGGACCACG	TGGAGAAAGG	GGTCCACCAG	GCCCCCAGG	180
CAGAGATGGT	GAAGATGGTC	CCACAGGCCN	TCCTGGTCCA	NNTGGTCNTC	NTGGCCCCCN	240
TGGTCTCGGT	GGGAACTTTG	CTGCTCAGTA	TGACGGAAAA	GGAGTTGGAC	TTGGCCCTGG	300
ACCAATGGGC	TTAATGGGAC	CTAGAGGCC	ACCTGGTGCA	GCTGGAGCCC	CAGGCCCTCA	360
AGGTTTCCAA	GGACCTGCTG	GTGAGCCTGG	TGAACCTGGT	CAAACTGGTC	CTGCAGGTGC	420
TCGTGGTCCA	GCTGGCCCTC	CTGGCAAGGC	TGGTGAAGAT	GGTCACCTG	GAAAACCCGG	480
ACGACCTGGT	GAGAGAGGAG	TGTTGGACC	ACAGGGTGCT	CGTGGTTTCC	CTGGAACTCC	540
TGGACTTCCT	GGCTTCAAAG	GCAACCTCGA	G			571

(2) INFORMATION FOR SEQ ID NO:256:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 453 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

GAATTCGGCC	AAAGAGGCCT	ATGCGCAAGG	ATCAAGCCGA	CTACCTGTGC	TGTCTACTGG	60
GACAGCAGTC	TCCGAGCTAC	TCCGTACCTC	CCTCTGCCAG	GTCTGGAGT	TAGGCCCCAG	120
TCCCTACTTG	TCACTGGTTC	CCACTGTGCT	CCTAACTGTG	CAGCACCTGG	GAGCTCTGGC	180
CTGGGGCTGG	AGGCCCTGGT	AGGAGCTGCA	GTTGGAGGCC	GTTCTGTGCC	CAGCAGCGGT	240
GAGCGGCTCC	CATGGGCCCT	GTGTCTGCAG	GGAGCCAGGG	CTGCGGCACA	TGTGCTGTGA	300
AACTGGCACC	CACCTGGCGT	GCTGCTGCCG	CCACTTGCTT	CCTGCAGCAC	CTCCTACCTT	360
GCTCCGTGTC	CTCCCTCTCC	CCGCGCCTGG	CTCAGGAGTG	CTGGAAAAGC	TCACGCCTCG	420
GCCTGGGAGC	CTGGCCTCTT	GATATACCTC	GAG			453

(2) INFORMATION FOR SEQ ID NO:257:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 307 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

GAATTCGGCC	AAAGAGGCCT	ATGTCATGAG	TGAACTGGC	AATTGCCTTG	TTAAAACCAG	60
TTGGACATTA	TCTTCCACAT	TGCGAAGCTA	TACATGTCTG	ATATGTTCTG	AAAGAATAGA	120
ATTTATAGTT	AGATATACTA	TTTTTGATTA	TTTACTCAGA	AGGAGACATG	TAATTATTCT	180
TATGTTGTCA	TGAAAATCTA	TTAAATGCAT	TTATATTTC	CATCAATGTT	ACGAAGTTCC	240
ATTATTATTA	TTTACAGAG	GGGAAGCCAA	GATACAGGAG	TGGAATTAC	TTGGCCTATC	300
GCTCGAG						307

(2) INFORMATION FOR SEQ ID NO:258:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 360 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```
GAATTCGGCC AAAGAGGCCT AAGAAGATGA ACAAGCGCCA GCTCTATTAC CAGGTTTTAA      60
ACTTTCGCCA TGATCGTGTG TTCTGCACTC ATGATATGGA AAGGCTTGAT CGTGCTCACA      120
GGCAGTGAGA GCCCCATCGT GGTGGTGCTG AGTGGCAGTA TGGAGCCGGC CTTTCACAGA      180
GGAGACCTCC TGTTCCTCAC AAATTTCCGG GAAGACCCAA TCAGAGCTGG TGAAATAGTT      240
GTTTTTAAAG TTGAAGGACG AGACATTCCA ATAGTTCACA GAGTAATCAA AGTTCATGAA      300
AAAGATAATG GAGACATCAA ATTTCTGACT AAAGGAGATA ATAATGAAGT TGCTCTCGAG      360
```

(2) INFORMATION FOR SEQ ID NO:259:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 411 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```
GAATTCGGCC AAAGGGGCCT ACCTGAAACG GCAAGTCCGGT CCCTCCGACA TTGTCCAGCG      60
GAAGGCCTGG GCTTCACACT CTGTGCCTCC CGGCGCTACC TGGCACGATG CCGAGCACAC      120
AGCAGATGCT CAATGAATGC CCAACCAACC CTATACCTGG CTTGGATCTC AAGCTCCCTG      180
GCCGGGGCCT GATGGAAGGC TTTGGGGGCA CAGGAGGCTG CCCCCTTGGG CGCCCCCGGC      240
CACCTCTTCG CCCTCGAATC TCAGGCAGCT TGGTCAGGAA CTTCTTCTCC ACGTATTAG      300
CGTGAATCCA GGCCTCCTTC TCCTGCCTGT GGGAGGGGAG AAGCACGCAG TCTTCCCTCT      360
TCTGCTCCAG GGTCCCCCA TTCCCTGGG AGGCTAAACC CATAGCTCGA G                      411
```

(2) INFORMATION FOR SEQ ID NO:260:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 324 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```
GAATTCGGCC AAAGAGGCCT AGGGAGTGTT TCGTTCCTT CTCCGTTTGG CAGTGAAACA      60
CATCTCAGAA AGGTGGAGCT GATCAGAATA ATGTTAGCA TCAACCCCTT GGAGAACCTG      120
AAGGTGTACA TCAGCAGTCG GCCTCCCTTG GTGGTCTTCA TGATCAGCGT AAGCGCCATG      180
GCCATAGCTT TCCTGACCCT GGGCTACTTC TTCAAAATCA AGGAGATTAA ATCCCCAGAA      240
ATGGCAGAGG ATTGGAATAC TTTTCTGCTA CGGTTCATG ATTTGGACTT GTGTGTATCA      300
GAGAATGAAA CCCTCAAGCT CGAG                                         324
```

(2) INFORMATION FOR SEQ ID NO:261:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

```

GAATTCGGCC AAAGAGGCCT AGTGGGGCTG TATTTTAATA CAAGAAAGAC ATTGCTCTAG      60
AACATGGCTC GCCTTTGCTT CAGGGCCTAG CAGTTTATTT TAGCCATAAG GGTAAGGGAG      120
CAGGTCAGAA ATGACTTTTA GTGTAATCCT ATCTGTAATT AAAAATACAA ATGCTGTCAT      180
AAGATCAAAT GTTATCAAAA ATCAGTATTT AAAATTAAAT TTACCCCCAA ATTTCTTTCA      240
AAAAAGTTGT AATGTTCTTT TTCAGTGAAG CCTTTGCACT GCTAGAGCTG AAGAATGTGA      300
TCAATCGGCT TGTGAATAA TCCGCACAG TAGGTATTCC GCTGAAGCCA ACTCTAGCTG      360
GGGGCTCGAG                                     370

```

(2) INFORMATION FOR SEQ ID NO:262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

```

GAATTCGGCC AAAGAGGCCT AAGAAATAGG ACTATACAAA TTTTCAACTT CTTTGTATAT      60
CAGTTTTGGT AAGATGCATT TTTCTTCTGA GAATTTGTTT CATTGGAATT TCCAAATTTA      120
TTAGCATGAA GTTGTTAATA AAAATCTTAT ATTTTACTC AAATTTTGAG ATAGTTGTAG      180
ATTACATGAA AGTTGTAAAG AATAATAGAA AGATCCTGTG TACCTTTTCC CAGTTTCCC      240
CAAAAGTAAC ATTTTGCATA ACTCTAGTAC AGTAGCACAA CTCGAG                                     286

```

(2) INFORMATION FOR SEQ ID NO:263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```

GAATTCGGCC AAAGAGGCCT AGGCAAACCG TGTACTAAGC ATCAGTGCAG AGATAGTGAA      60
TGAGACACAG TATCCCACC TTTGAGCAGT GCCAGTCTAG TATTAGAATA TTTTGGCTA      120
AAAAATTATT TTGAAGCATA AAGAAGCTTT TGTGTGCTCT GGTGATTTTC ATAACATATT      180
CACATTCTTA ATGTATTTT GGTTTTTCAG AAAGTTACTT CTGGCCTGTG TCTTTTCAGA      240
ATATAGGTTG CAGCTTGTGT TAAGTGCAGG AACTATTGAT AGACTGAGTT TAGAAGAAGG      300
GAAACTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

```
GAATTCGGCC AAAGAGGCCT AGGACTTTGG GGCAGGTGAT TAAATTTATA TAGGTACCTC      60
AAGAAAAAGA ACCTGAATAT GCTGCATTTT CTTCCTTTAG CTTTACATG TAGCATTTTG      120
TTTTGCTTTT GTTATTTTGG TTTTGATATA TGCTTTTGG ACCCCAATAG ACTGTTGAAA      180
GAAATTTAAA AATTACTCTT GTAGGGATAT AGTATCCTTA AAAAATAAAA ATTAAAAAAA      240
ATTTAAAAAA ATTGCTGCAA TATCTGGCTC GAAGGTTGCC CTATATTAGA ATAATACTTT      300
AGCCAAACAC ATCAGCTCGA G                                     321
```

(2) INFORMATION FOR SEQ ID NO:265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 550 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

```
GAATTCGGCC TTCATGGCCT TGTGATTCTG CAAAGGAGGA ACAATAATTC ACTGTTTCCC      60
AAACTTATCT GACCATAGAA CATATNTCTC AGAGTATTTT TCAAGAGTAG TATTTTCTGT      120
AATATATGAT GAAAAATAAT CGTATCGGCC ATCTTTGTAC ATAAGGTCAA AATGTCAGCC      180
AGCCCTGAAA TAAATGCAAG CCAAAGGTA GAGAGATAAG TGAATAAAGC TGGCACACTG      240
TCAGTCCGGA GTACCATGCT GCATTCTGAG TCAAGTCCA GGAAACTGAG CTAGGGTTTG      300
TCTCTAAGAA GAAAACTGG AGCGTCCAAA GCTTCTGGAT TCCATTTAAT TAAACCCCTT      360
TTAAATTAAA TCCTTGTAAC TGAAGAGTAT CGGTGGATGA AGAAAAATA GTCTCACATG      420
TCTTCATTTT CATCCTTGGC TCAGTACAGC TCCAGTTCCA TTATTCTTAA ACATCTATTA      480
ACATGATTGC TAAATAATTA CACAGGCTAA CTGCCAAGCA TTTTTCACAG GAAGCAAGGC      540
ACTGCTCGAG                                     550
```

(2) INFORMATION FOR SEQ ID NO:266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```
GAATTCGGCC TTCATGGCCT AGTTAAGTGG GAAGTTAAAT GGCAAGTACT AGAATGCCAC      60
CTATGGCAAG CACTAGAATG GTCTAGGTGT GAAATGAGGG AGTAATGTCA GGGAGTCAAG      120
GTGGCCATCC ATAGCAGTGA TTCTTATCTG GGGTAGGGGG TGAATTTTAC GTGGAGGGAG      180
GTCTCTGGAC ATGGACCCCC AGGCAGGGCT ATCCAATCAT CTGAGGGGTG AGCAGTGTTC      240
AGCTCAGTAA AAGTAAGGGA AAAAAATAG CAGTCTCTAA AAGGAACATA GAGCGCTCGA      300
G                                     301
```

(2) INFORMATION FOR SEQ ID NO:267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GGGGAGAGCA TCAGGAAGAA CAGCTAATGG ATGCTGGGCT TAATACCTAG GTGATGGGAT      60
GGTCTGTGCG GCAAACACCA TGGCACAAGT TTACCTATGT AACCTGCACA TCCTGACATG      120
TACCCCTGAA CTTAAATGA AAGTTGGAGA CCAAAAAACA AAACACCATA AAACACAAA      180
ACTTCTTAAA CAATAAACTA GTAGAAAATT TCTAAAATAT ATAATTCAAG AATTATATAA      240
GAGCTCTTTT TATATGTAAA TATAAATTTA AATACAAGAG AAACATCTAA AACAGGTTGC      300
TTCTGAGAAA CGTGACTGGT TATTAAGAAG AGGTATATAG GGGCTCACTC GAG              353

```

(2) INFORMATION FOR SEQ ID NO:268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

CATTATTTAA CCTTTTAAAC AATCAAGAGA TTGCTTTTAA AATTGTCTCT AAAAAGGTTT      60
GATTTTTTAC GAAAGAGAGA GCACCTGAAT ATATCTTTAT GTACCACCGT GTCTCTTTTT      120
GTTAGATTTT TCATCTGTGG GTATAATATA AAATATTCTT AAAATGAAAG CTTTACGCTT      180
GTGTTTGAGA CTAAGCAACT TGCATTGTGT CATGACCCTT CTAATACCAC AAACCCTCGA      240
G                                          241

```

(2) INFORMATION FOR SEQ ID NO:269:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```

GAATTCGGCT TCATGGCCTA CACTCAACCA CTGAAAAAGC TGAAAATCAA TGTTTTTAAG      60
GTTCAACAAG GTGCCGTGTG TGGCTTCACC ACCGAAAACC TGCTGCAATT CCACGAACAC      120
ATCCCTCAGC ACAAAATCGGA TGGTTCTTCC TACCAGTGCC GGGAGTGTGG CCTCTGCTAC      180
ACGTCTCAGC TCTCTCTGTC CAGGCACCTC TTCATCGTAC ACAAGTTAAA GGAACCTCAG      240
CCAGTGTCCA AGCAAATGG GGCTGGGGAA GATAACCAAC AGGAGAACAA ACCCAGCCAC      300
GAGGATGAAT CCCCTGATGG CCCCCTCGAG              330

```

(2) INFORMATION FOR SEQ ID NO:270:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

GCGGGCACCA	TTTCCAGTAT	GTACCAAACC	AAAGCCGTCA	TCATTGCAAT	GATCATCACT	60
GCGGTGGTAT	CCATTTTCAGT	CACCATCTTC	TGCTTTCAGA	CCAAGGTGGA	CTTCACCTCG	120
TGCACAGGCC	TCTTCTGTGT	CCTGGGAATT	GTGCTCCTGG	TGACTGGGAT	TGTCCTAGC	180
ATTGTGCTCT	ACTTCCAATA	CGTTTACTGG	CTCCACATGC	TCTATGCTGC	TCTGGGGGCC	240
ATTTGTTTCA	CCCTGTTTCT	GGCTTACGAC	ACACAGCTGG	TCCCGGGGAA	CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:271:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

GCCGAGTAC	CACAAGCCCC	ACCCACACTA	TGCCAAGCCC	TACCCATACC	ACAGCAAGCC	60
CCACTCATAC	TTCCACAAGC	CCCACCCATA	CCCCACAAG	TCCACCCAC	AAAACCAGTA	120
TGTCACCTCC	CACCACTACA	AGTCCTACCC	CCAGTGGTAT	GGGCCTAGTC	CAGACTGCCA	180
CAAGTCCCAC	CCATCCTACC	ACAAGCCCCA	CCCATCCCAC	CACAAGCCCC	ATCGTTATAA	240
ATGTAAGCCC	TTCCACTTCT	CTAGAACTTG	CTACCCTCTC	CAGCCCCTCC	AAACTCTCAG	300
ACCCACCCCT	CCCAGGCAAT	GACTCCCTTC	CCTGTAGTCC	CCCAGTCTCC	GATTCTTACA	360
CTCAGGCAGA	CCCTATGGCC	CCCAGAACTC	CCCACCCAAG	TCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

ACTGAGCTCA	AGGACCCCTC	CAAGAAGAAG	ATGCAGCACA	TCTCCAACCT	GTCCATCGCT	60
GTCATGTACA	TCATGTACTT	CCTGGCTGCC	CTCTTGGGCT	ACCTCACCTT	CTACAACGGG	120
GTGGAGTCGG	AGCTGCTGCA	CACCTACAGC	AAGGTGGACC	CGTTTGACGT	CCTGATCCTG	180
TGTGTGCGCG	TGGCCGTGCT	GACAGCAGTC	ACGCTCACAG	TGCCCATCGT	TCTGTTCCCG	240
GTGCGCCCGG	CCATCCAGCA	GATGCTGTTT	CCAAACCAGG	AGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 537 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

GAATTCGGCC	TTCATGGCCT	AGTCAAGCTA	GGTAAGCTAA	AAAGAAGAAA	ACCTGGTTAC	60
AGCCCGGTGA	ATTGATTTT	TCCAGCCGA	GAAATAGATA	TTTCTCTCAC	ATATATTGG	120
AAACTTTAG	TCATCTTCAT	AAACTTAAA	AAGTTACCTA	AGCACACACA	GCAAGTTTCT	180
CCTTTCTTCC	TTTTCCACAC	CCTTACCAGT	TCACTATGTT	TCTACCAATC	CAGTGCCCAG	240
TTGCCAATGA	TGTTGCTCTC	ACATGAATTT	ACTGCATTCC	CTTCTGGTTC	CCCAGAAGGT	300
CTTGAAGAAA	GAGGTTTCTA	CTAGTGGACC	CAAACAGAAT	TTCTTGGCTG	GTGATACTCA	360
GATTGTGTTT	AGAGCCTGGT	ATGAAGAAGG	GGCCAGGTGT	AAGAAGTAGT	TAATCAACTG	420
CACGTTGATT	TCAGGCTGAA	TATTCAACCA	TCTGCAGCCA	CCCGTCTCTA	AAAGTCTAGC	480
TGAAGCACAA	TTGATTGTGC	CATAGAAATGA	GCAAACGCTT	GAAAACACAA	GCTCGAG	537

(2) INFORMATION FOR SEQ ID NO:274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GCGAGCTCGT	GTTTTAAAGG	ACCAAATAGA	AGTTTACCAG	GAGAGAAGTG	ACAGAAGTGC	60
TGTCTAGATA	GAGGAAGGGC	ACACACAGAT	GCAAGCATGT	GCAGAAATGA	GCAAACCACT	120
GAGACGCTGC	CTTGAGCTCT	GTGTCACT	GCTATGTTGC	AGCCTGGGAG	GCTGTTCCCA	180
GTTGAGCCCT	TCGGAACCAG	CCATGAGATG	GCACGGGTAC	GCGGAAGGGA	GCAGTCTCCA	240
TGGCTGGGTG	GTGATGGGGG	CTTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GATGGCTCCC	CAGAGCCTGC	CTTCATCTAG	GATGGCTCCT	CTGGGCATGC	TGCTTGGGCT	60
GCTGATGGCC	GCCTGCTTCA	CCTTCTGCCT	CAGTCATCAG	AACCTGAAGG	AGTTTGCCCT	120
GACCAACCCA	GAGAAGAGCA	GCACCAAGA	AACGGAGAGA	AAAGAAACCA	AAGCCGAGGA	180
GGAGCTGGAT	GCCGAAGTCC	TGGAGGTGTT	CCACCGACG	CATGAGTGGC	AGGCCCTTCA	240
GCCAGGGCAG	GCTGTCCCTG	CAGGATCCCA	CGTACGGCTG	AATCTTCAGA	CTGGGGAAAG	300
AGAGGCAAAA	CTCCAATATG	AGGACAAGTT	CCGAAATAAT	TTGAAAGGCA	AAAAGCTCGA	360
G						361

(2) INFORMATION FOR SEQ ID NO:276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GCCACAATAG	CGGGATTGAT	CTCCTTAGGA	CCTATCTTTG	GCGTTGCCAG	TTCCTTTTAC	60
CTTTTGTGAG	TTTAGGTTTG	ATGTGCTTTG	GGGCTTTGAT	CGGACTTTGT	GCTTGCATTT	120
GCCGAAGCTT	ATATCCCACC	ATTGCCACGG	GCATTCTCCA	TTCCTTGCA	GGTCTGTGTA	180
CACTGGGCTC	AGTAAGTTGT	TATGTTGCTG	GAATTGAACT	ACTCCACCAG	AAACTAGAGC	240
TCCTTGACAA	TGTATCCGGT	GAATTTGGAT	GGTCCTTCTG	CCTGGCAGAA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

GAATTCGGCC	TTCATGGCCT	AGGATGTAGA	ATCCTGCTTA	TCTGTGAAAT	GCAGTTGACA	60
CATCAGCTGG	ACCTATTTCC	CGAATGCAGG	GTAACCCCTT	CGTTATTTAA	AGATGTAAAA	120
AATGCGGGAG	ACTTGAGAAG	AAAGGCCATG	GAAGGCACCA	TCGATGGATC	ACTGATAAAT	180
CCTACAGTGA	TTGTTGATCC	ATTTCAGATA	CTTGTGGCAG	CAAACAAAGC	AGTTCACCTC	240
TACAAACTGG	GAACAATGAA	GACAATGAAC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

TCGTTCCCTT	CATCTCTTCC	CTTGCCAGAG	CAGGGACTCT	CTCCATATAA	ACAAAAGGAA	60
AACCACTGGC	CAGGGTATGG	TCAATACCTC	AACATATCCA	GACATCACAG	CACCAGAACA	120
CCAGTATGTA	TATTCCACAA	GTAATCGAG				149

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

GCAATCAGAT	AAAGAAAGAC	CTGGCTGACA	AGGAGACACT	GGAGAACATG	ATGCAGAGAC	60
ACGAGGAGGA	GGCCCATGAG	AAGGGCAAAA	TTCTCAGCGA	ACAGAAGGCG	ATGATCAATG	120
CTATGGATTC	CAAGATCAGA	TCCCTGGAAC	AGAGGATTGT	GGAAGTGTCT	GAAGCCAATA	180
AACCTGCAGC	AAATAGCAGT	CTTTTACCC	AAAGGAACAT	GAAGGCCCAA	GAAGAGATGA	240

TTTCTGAACT CGAG

254

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

GACAGCCTGG	AAGTTTGGAG	ACCCTGACAC	ACCCACCTTC	TCACCTGGGC	TCTGCGTATC	60
CCCCAGCCTT	GAGGGAAGAT	GAAGCCTAAA	CTGATGTACC	AGGAGCTGAA	GGTGCCTGCA	120
GAGGAGCCCG	CCAATGAGCT	GCCCATGAAT	GAGATTGAGG	CGTGGGAAGG	TGCGGAAAAG	180
AAAGCCCGCT	GGGTCCTGCT	GGTCCTCATT	CTGGCGGTTG	TGGGCTTCGG	AGCCCTGATG	240
ACTCAGCTGT	TTCTATGGGA	ATACGGCGAC	TTGCATCTCT	TTGGGCCCAA	CCAGCGCCCA	300
GCCCCCTGCT	ATGACCCCTG	CCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

GCCTGGAACC	TGATTCTCCT	GACCGTCTTT	ACCCTGTCCA	TGGCCTACCT	CACTGGGATG	60
CTGTCCAGCT	ACTACAACAC	CACCTCCGTG	CTGCTGTGCC	TGGGCATCAC	GGCCCTTGTC	120
TGCCTCTCAG	TCACCGTCTT	CAGCTTCCAG	ACCAAGTTCG	ACTTCACCTC	CTGCCAGGGC	180
GTGCTCTTCG	TGCTTCTCAT	GACTCTTTTC	TTCAGCGGAC	TCATCCTGGC	CATCCTCCTA	240
CCCTTCCAAT	ATGTGCCCTG	GCTCCATGCA	GTTTATGCAG	CACTGGGAGC	GGGTGTATTT	300
ACATGTGTCC	TGGCACTTGA	CACCCAGTTG	CTGATGGGTA	ACCGACGCC	GCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

GCGGGCTGCA	GAATGATAGA	CGAGCTCAAC	AAAACGCTGG	CCATGACCAT	GCAGAGGCTG	60
GAAAGCTCTG	AGCAGCGGGT	CCCCTGTTC	ACTTCTTACC	ACAGCTCTGG	GTTGCACTCG	120
GGTGATGGGG	TCACCAAAGC	AGGACCTATG	GGCCTTCCAG	AAATAAGACA	AGTGCCAACT	180
GTTGTGATTG	AATGTGATGA	CAATAAAGAA	AATGTGCCTC	ATGAGTCAGA	CTACGAAGAC	240
TCTTCTTGCC	TGTATACAAG	AGAAGAGGAG	GAAGAGGAGG	AGGACGAAGA	CGACGACGAA	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

```

AATCAATCAA CTAGGCATAT GACACAGTAG TCCATTATAA AAGAAGACAT ACATCCAGCA      60
CCATCAACTA ATTCTTAAGA TAAGTTATCT GGGAAAATG  AAGAACAAAT AAATTCAACG      120
AAATACTGTA AAGTGAACGA AGACATAAAA CCAAAGAAAA CTGAGGCCAT TTCTGCCAAG      180
AAAGGAACAG CAAAGAGTAA AGATGAAAAA TATTCTAAGA TAATACCAGA AAAAGATAAT      240
TCCTACATGG ACAAAGATGA GCATGGTTCA TCCTCTGAAA GTGAAGATGA AGCGCTGGGT      300
AAATATCATG AGGCCTTATC CAGAACACAC AATTCCGGAC TACCACTCGA G              351

```

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

```

AAGTTAAAGG TATTAAATAA ATGAGTTTCT CCTTAATTTT GTTAATGCTC TTTTAGCTAA      60
TAAGACTTTT TCTAGAGTTA CATATTTTAA TCTGTTCAT TTTTATTTT TCCTTTGGTT      120
TTATATTTT AAAAGCCATT ATATCCCTCC CACTGGTAAC ATACACATAC ACAGACACAC      180
ATCTATTTCA AATGAATACT TACTACTTTA TCATTTTCAG TCTTAATTGT ACT              233

```

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

```

GCGGCGCCGC AGCAGTTCCA GGAAGGATGT TACCTTTGAC GATGACAGTG TTAATCCTGC      60
TGCTGCTCCC CACGGGTCAG GCTGCCCCAA AGGATGGAGT CACAAGGCCA GAATCTGAAG      120
TGCAGCATCA GCTCCTGCCC AACCCCTTCC AGCCAGGCCA GGAGCAGCTC GGACTTCTGC      180
AGAGCTACCT AAAGGGACTA GGAAGGACAG AAGTGCAACT GGAGCATCTG AGCCGGGAGC      240
AGGTTCTCCT CTACCTCTTT GCCCTCCATG ACTATGACCA GAGTGGACAG CTGGATGGCC      300
TGGAGCTGCT GTCCATGTTG ACAGCTGCTC TGGCCCTGG AGCTGCCAAC TCTCCTACCA      360
CCAACCCGGT GATCTTGATA GTGGACAAAG TGCTCGAG              398

```

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

```
GAATTCGGCC TTCATGGCCT ACACCCAGCC AATTTTTTTG TATTTTGTAGT AGAGACGGGG      60
TTTCACCATG TTAGCCAGGA TGGTCTCTAT CTCCTGACCT CATGATTTCG CCGCCTCGGC      120
CTCCAAAAAA AGAACATTTT ATATTGAGT GCTATTTCTT TTGCGGCACC AAAACTTTAT      180
AACACACTGC CTTCTGAATT TTTTTTTTTG GTTCTGCTC AGCTCATTGT TAATCATATT      240
GTTCCCATGT ATGTCATGAG TTATTTTCTT CCTAGTCTTT TCAAAATTTT CTGTCTTTG      300
ACTTTTAACA GTTTAATTGT AACAGTGTAT ATCTTTAAAG TTAAATTCAT GCTTGTGAAT      360
TTTTATAAGA GCCACAAAGG CCTTCCTCTG TGTTTTGTGT TTGTTTTTGT TTTTGTTTTC      420
ATTTTGTAGA CAGGCTCTCA CTGTCCCTCA GTGGCTCTCG AG                      462
```

(2) INFORMATION FOR SEQ ID NO:287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

```
TGGACAGTCT AGAAGATGCT GTGGTGCCCC GGGCTCTGTA TGAGGAGCTG CTGCGCAACT      60
ACCAGCAGCA ACAGGAAGAG ATGCGCCACC TCCAGCAGGA GCTGGAGCGG ACTCGGAGGC      120
AGCTGGTACA ACAGGCCAAG AAGCTCAAGG AGTACGGGGC ACTTGTGTCT GAAATGAAGG      180
AGCTCCGTGA CCTTAACCGG AGGCTCCAGG ACGTGCTGCT CCTGAGGCTT GGCAGCGGTC      240
CGCCATTGA TCTGGAAAAA GTAAAGTCAG AATGTCTCGA G                      281
```

(2) INFORMATION FOR SEQ ID NO:288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

```
AATGGAAGTCT CTGACACAAT ACTCGTGTA CTGTGTGGAA CCGCATAATC CCAGCAATGG      60
CACATTGAAG GAATGGAGGG AATCCAATAT TTCTGCCTCT GACATAATTT GGGAGAACCT      120
AACTGTGTCA GAATGCAAAT CATTGCATGG AGAGTATGTT GGACGGGCCT GTGGCCATGA      180
TCACCCATAT GTTCCAGATG TTCTATTTTG GTCTGTGATC CTGTTCTTTT CCACAGTTAC      240
TCTGTCAGCC ACCCTGAAGC AGTTCAAGAC TAGCAGATAT TTTCCAACCA AGGTTTCGATC      300
CATAGTGAGT GAGTTTGCTG TCTTCTTAC AATTCTGTGT ATGGTTTTAA TTGACTATGC      360
CATTGGGATC CCATCTCCAA AACTACRAAGT ACCAAGTGT TTCAAGCCCA CTAGGCTCGA      420
G                      421
```

(2) INFORMATION FOR SEQ ID NO:289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

```

AAGCCAATGG CTGGTCGTGA TCCTGAATGC CAACGCACAG AAATGATTAA GAAAGAAGAA      60
GAACGTTTGA GGGCTTCCAT ACGTAGGGAA TCTCAGCAGC GCCGAATGAG AGAGAAACAG      120
CACCAGCGGG GGCTGAGCGC CAGTTACCTG GAACCTGATC GATACGATGA GGAGGAGGAA      180
GGCGAGGAGT CCATCAGCTT GGCTGCCATT AAAAACCGAT ATAAAGGGGG CATTGAGAG      240
GAACGAGCCA GAATCTATTC ATCAGACAGT GATGAGGGAT CAGAAGAAGA TAAAGCTCAA      300
AGATTACTCA AAGCAAAGAA ACTTACCAGT GATGAGGTAA GACCAAATTT ATTCATTCT      360
AGGGGTTTAT CCTGTACTCA GGAGCCTACT GCTTTGAATG AAAAGCTCAC ACTCGAG      417

```

(2) INFORMATION FOR SEQ ID NO:290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

```

CAAGCATACA ATCAACTCCA AGCTCGGTAT CACCTGAGCC CAGGAAGTGG AGGCTGCAGT      60
GAGCTATGAT CAGTAAAACA CAAGACAGGT TCCTGGGCTC CCATCCCAAC CCGGACCAGC      120
TCCCTAGTAT AACAACTCAC ATGCATGTGG ACTATACCCT TACAGCCTTC TTCTGTGTGT      180
TTATGTGCAT ATATGTAGCC ATAGGAAAAA AAATCAAAAT CCTTGGTGT TCTTTCTTAT      240
TTTTTCAAAT ATTTACCTG CCCCATTCTC TTTCTTTCT CCTTCTAGTA CTCCCATTCG      300
ATGCAGTTCT CGAG                                     314

```

(2) INFORMATION FOR SEQ ID NO:291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

```

GTGTATGTGG GGGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTGTGTGT      60
GTGCGCCTGC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA      120
GAAACATGGC GCATGTGAGC ATGCCACTTC TTGTGTGCCT GTGACTGTTC AGAATGTACA      180
CGGCCCTGCA GCTCCCGAAG GCCAGCTCTG CTGCAACCCC TCCTCTGTCC AACACAGTCC      240
TCACTGGTGT CTTTCTCTCT TCAAATCTAC AGCATTCTG ATCTCTGCAA ACAATTTAAC      300
CCAAAACCAA GTTCTGGCTG ACAAGGCTAC ATCTTGTTC TGTGCGTGA TTAGCCTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

```

GCGATTGAAT TCTAGACCTG CCTGAGTCG ATGCACCGAA AAGGGTGAAG TAGAGAAATA      60
AAGTCTCCCC GCTGAACTAC TATGAGGTCA GAAGCCTTGC TGCTATATTT CACACTGCTA      120
CACTTTGCTG GGGCTGGTTT CCCAGAAGAT TCTGAGCCAA TCAGTATTTC GCATGGCAAC      180
TATACAAAAC AGTATCCGGT GTTGTGGGC CACAAGCCAG GACGGAACAC ACTCGAG        237

```

(2) INFORMATION FOR SEQ ID NO:293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

```

GAATTCGGCC TTCATGGCCT ACTTTATTTT TTTAATTATT ATTAGTATTA TTTTGAGACT      60
GAGTCTTGCT CTATCACCCA GGCTGGAGTG CAGTGAGCTG AGACTATGCC ACCGCACTCC      120
AGCCCGGGCG ACAGAACGAG ACTCCATCTC NAAAAAAAAA AAAAAAATCT ATGTTTCATGC      180
CTTNACACCT GTTTCGAC ATAGCTGTGC AGTATATTCT TCTTCTAAGC AACGACCCAG      240
TGAAGATCCA AACAAAAGTT CACAAATATG TAGTTATCCA AGGCACCTCG AG            292

```

(2) INFORMATION FOR SEQ ID NO:294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 136 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

```

GAATTCGGCC TTCATGGCCT ACAATCTTTT AACTTTGGGG GTCACAGTTT TAGCCACCTT      60
TCGGGGGGTG ACTGGAGCAG TAGGAGGTGT GGGGTCATTT TATGAATATA ATAAAATGGA      120
GCTGACTGTA CTCGAG                                136

```

(2) INFORMATION FOR SEQ ID NO:295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

GAATTCGGCN	TTCATGGCCT	AAAATAACAC	ACAATTAGTA	TAGAAAAATT	GCAAACACAG	60
ATAAAAGTCC	TTTCCTGTG	AATTTCTGAA	TGCACCTTTG	AATATTCACA	TCTTACTGCC	120
AAAATGAGAT	TGTCTTGTG	GCCGTTCTGG	AATTTGCTTT	TTCCAGCTT	ACATGTTCTA	180
GGTCCTTCCA	GATCAATAGC	TGCACTCCCT	CCTTCCTCTG	CTGGTTTCTC	AGCTCGATGG	240
GCTGTAAGTG	GCATTACTCT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

GAATTCGGCC	TTCATGGCCT	ACAACCTCAT	AAATCTCATT	CTTAATTTCA	CTCTAGGACA	60
GAATTATTGT	AGCACCTGTG	TTCTGTTATT	TTAGATTCAT	TTAACTTAC	CTAGACACGG	120
GTACTGTGGT	AGTTGTAGAG	GTACAGATGT	TGAGTTCCCA	TCCTCCTGGC	TTAATGTCAC	180
TGGGGTTATT	AATACACTTC	ATAAGCATT	TAGGGACACC	TGCTGTCTGC	TCAACCCCA	240
GCAAACCTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

GAATTCGGCC	TTCATGGCCT	ACATCTGGTA	AATTTTCTT	TCTGCCTGAG	GAACACCCTT	60
TAGCATTTAT	TTAGTCTGCT	GGTGACCAAT	TCTCATATT	TGTTGTCTG	AAAAATACCT	120
TTATTTTGT	TTAATTCTTG	AAAGATATTT	GCACTGGTGT	GATTGGATTC	ATGATTGCTT	180
ATTATTTTCT	TTTTCTTTT	TCTTTTGTGA	GACAGAGTCT	CGCTGTCGCC	CAGGCAGGAG	240
TGCAGTGGCC	CGTACTCGAG					260

(2) INFORMATION FOR SEQ ID NO:298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

GCTCTGAATC	TATTTTCTAG	GACATTTT	TCCCATTTAG	ATTAAGCCAG	AGAGAGCCCT	60
TTCTTGCTC	CCAAGAGTTT	TTCTTTGTGT	GACTGTTGGT	ATTCTGAACC	TCTTGGAATT	120

GATGCCTGGA ATTGTCCTAG AGACTCTCCT GATTTCTGTC TCATTCTTTG ATTTACCCT	180
GGGGAGCTGG GGAAGAGATA CCTTCCCATG GCATCACTTG TTAAGAGTGG ATCCCCCTT	240
CCCCTTTCCT TCTGTCCCC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAATTCGGCC TTCATGGCCT ACCAAAACAA AAGAAGAAAT CATTTCACTC ATGCTTAGAA	60
AGATGTCAAG AGGATGGAGG ACTCACATTC TGTTAACTCT TCTGCCTGTA ATATATGCTT	120
TAAACACTAA AAATGATGAG CATGAATCTG CAATTCAAGC CCTCAAAGAT GCTCATGAAG	180
AAGAAATTCA ACAAATTCTT GCTGAAACAA GAGAAAAAAT ATTGCAGTAT AAAAGCAAAG	240
TAACAGAGGA GCTAGACCTT AGAAGAAAGA TTCAAGTTT AGAATCATCA TTAGAAGATC	300
ACAATCTCGA G	311

(2) INFORMATION FOR SEQ ID NO:300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GCGATTGAAT TCTAGACCTG CCTCGAACTC GTGGCCTCAA GTGATCCACC TGCCTCACCC	60
TCATCACCTG CCAAGTCCTA CCCATTCTAA CCCTGATAGC TCTTAAATCA GGTCTTTCCA	120
CCTCAACCTC ATTATCACTG CTCTAGAGCT CAAGCCTTCA GTGTCCTTTC ACTTCCTGAA	180
TTTACTGTCT TAGTGCTCTT GCTCACATTG TATTCTNTGC CCAAATGCT CTTACCACTC	240
CCNTTCTTTC TCGAG	255

(2) INFORMATION FOR SEQ ID NO:301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GAATTCGGCC TTCATGNCCT ACTTGGATT ATCACAGTAG CATTTGTCTT CAATCTGTGT	60
GTTAACTAGA AATCAAGGAA AGACATGAGG AGATTTGTCT ACTGCAAGGT GGTCTTAGCC	120
ACTTCGCTGA TGTGGTTCT TGTTGATGTC TTCTTACTGC TGTACTTCAG TGAATGTAAC	180
AAATGTGATG ACAAGAAGGA GAGATCTCTG CTGCCTGCAT TGAGGGAGAT CCGCACGCAG	240
CTGGTGGAGC AGTTCAAATG TCTGGAGCAG CAATCAGAGT CGCGACTGCA GCTGCTTCAA	300
GACCTCCAGG AGTTTTTCCG CCGGAAAGCT GAGATTGAGC TCGAG	345

(2) INFORMATION FOR SEQ ID NO:302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

```

GAATTCGGCC TTCATGGCCT AATCCTCCAG ATTATTATGG ATATGAAGAT TATTATGATT    60
ATTATGGTTA TGATTACCAT AACTATCGTG GTGGATATGA AGATCCATAC TATGGTTATG    120
AAGATTTTCA AGTTGGAGCT AGAGGAAGGG GTGGTAGAGG AGCAAGGGGT GCTGCTCCAT    180
CCAGAGGTCG TGGGGCTGCT CCTCCCCGCG GTAGAGCCGG TTATTCACAG AGAGGAGGTC    240
CTGGATCAGC AAGAGGCGTT CGAGGTGCGA GAGGAGGTGC CCAACAACAA TGATCTCGAG    300

```

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

```

GAATTCGGCC TTCATGGCCT AAAAAAAGA AGTTTATTTA AAGAACTCT ATAAGAGCAG    60
CTTGGATTTT ATATCTTTAG ATCCAGAGTT TTTACTTTTC TGGAATTAAA TATAATTGTT    120
TGAATTTTAC TCTTTATTGT TGAATTTTAA AGCGTGAATA AAGTAGTGCT TCTTAAGATA    180
ATTGTCATGT GTTTTGTGTT TGTGTTGTTT TGTTTTTTGG TGCTGAGTGT TGCTCTGTCG    240
CTCAGACTGG AGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

```

GAATTCGGCC TTCATGGCCT ACAATTCGGA TAAAGTTTAA GGTCAGCTGA TGAAGAACAC    60
TCAAACCAAA GTCGCCCATT GGAGGAGCGC CCTACCTCAC AGGAATAGGC CTGCATTATT    120
AGTATACCTT CTTCAATCAG TTATTGTTAT TCTTATGGAA ACAACCCATG GGAAATGTAG    180
CCTTGGCATG ACTGTATCAA TGGATTGAGA GAGCAGTAGC GGGGACCCCC CCAATCAATT    240
ACGTTCCACA GCAAGTCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

GAATTCGGCC	TTTCATGGCC	TAAATCTCAT	AAATAGAAAG	NAAAATAATC	TAGAAATTTT	60
TCAAAGCTAG	TACTCTTTCT	CCTTATAAAT	GTACACAATT	TTAATCTTTT	TACAAATTTA	120
TTTAACTGTA	CCTACTGTAC	TTATTGTAGA	TTCAATGACG	CAGTTAAGTC	ATCACCCAAG	180
GATTTATGAA	TTTGAGATTA	CTGACCTGTT	TTCTTCATAT	TGCATTCACA	TCAATATTTG	240
TGAATTGTGT	GTTTACGCTT	TCATTCAAAC	AAAAAATATT	CCCCCAAGAA	AACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

GCGATTGAGT	TCTCCCTGCT	GGTTCTTTTG	AATCACACCA	AATGAATGGC	TTGCTACTGT	60
TCCCTCACAC	CTTCATATTG	TCCATGGTTT	TTCCACCTC	CTTAGCTATA	CAGCTGCTGT	120
TCCTCCTGCC	TAAAATGTCT	GAACATTCCC	TCAGTGTTCA	GCTCAGCCCA	CATCTTACAT	180
CTTCCCTAAG	GATGTTTTTC	TGCTGCTATC	ATTCAATTTT	TTCTATGAG	TTCTCTGT	240
ATATTGGGCC	ACCAGAACTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

GAATTCGGCC	TTTCATGGCC	AGCCCCGACT	AGCTTTGCCC	TAACTCCTTC	ATCAAAAGAC	60
CCCCCGCCAG	CTTCCACAC	CTCATACGCA	GCCACATCTG	CCCTATTCTC	CATGCTTTCC	120
AGCTTGCCCTG	CCCTTCCTCA	TCTCTCCCTG	CCTGTGCAGA	CCTCCACCCT	TCTTTCCTCC	180
ACCCCTCCAT	CCCCCAATGC	TTGTAGACCT	TCCATTCAAT	CGTCTCATC	GTGCGTGGTC	240
TCTGATCGTC	CATCACCTGA	CCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

```

GAATTCGGCC TTCATGGCCT AGCCAAAATC ACAAGAAAAA TAACTTTGAC TTTGAAAACA      60
AATAAGTTAG AAATGCAGTG TTTGCACTTC GTGGTTTATG TTTGCTTTGG TGGCCTCTCA      120
TTCCCACTTA GCCTCAGTCT CCAGGGCCTG GGCTCCACCA AGGAAGACTC CATCTGCTCT      180
CTCTATTTGC AACTGGGAA CTTTTTCCC CAAGGTACAG GATATGATTG AGGGTTTATG      240
GATGACCTCC CACCCCTCGA G                                     261

```

(2) INFORMATION FOR SEQ ID NO:309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

```

GAATTCGGCT TCATGGCCTA CCTATTCCCA AACTTTAAAT GTTGTCTACC AAATACTGAC      60
AATTATGAAA ATTCTACCAG TAGAACACAC CTCCCTTTG AGCTCCAGAG CACATGCTTG      120
ACATCTCATA TTAGAAAGAA TCTTGATTTC CCCTCCAGTC TAGTCTTTCA TGTTTTGTTC      180
TTCTTTGTGA GAGTCTCCCT CAGCCTGCAA TGGCGTGATC TCGGCTCACT TCAACCTCCC      240
GTGCTCGAG                                     249

```

(2) INFORMATION FOR SEQ ID NO:310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

```

GAATTTGTTT NAAAAAAAAA AAAAAAAAAA AGGGCNGGGG GGAAAAAAAA AAAAAAGAAC      60
TCCTGGAGAG GGAAATAGCA AATGTGTCTT GCCTTTTGTG GCTCTCTCTC TCTTTTTCCT      120
TCTCTCGCTC TCTTCTTC TCTTCTCTC TCTGTTTTA AGTCAAGCAT TGGTCTCGAG      180

```

(2) INFORMATION FOR SEQ ID NO:311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 742 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

```

NNNNNNNNNN NNNNNNNNNN NNNNNNNNAN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      60
ANNNNNNNNN NNNNNNNNNN NNNNNNNNNN ANNNNNNNNA NNNNNNNNAN NNNNNNNNNN      120
NNNNNNNNNN NNNNNNANNA NNNNNNNNNN NNNNNNNNAN NNNNNNNNNNA NNNNNNNNNN      180
NNNNNNNANN NNNNNNNNNN CNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      240

```

```

NNNNNNNNNA NNNNNNNNAN NNNNNNANNN NNNNNNANAN GNANNNNNNN NNNNNNNNNN 300
NNANANANNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNC CCCCTTTGTC 360
ATNGTTNTCG TTCCCNNTTCT TCCTTGTTTC TTTTTCGGCA CAATATTCA AGNTATACCA 420
AGCATACAAT CAACTCCAAG NTCGGAATT TAATTACTTC ATGGCCTACT TGATGCAGGC 480
TGGAATGTTA TCCCTGGGGT GTGCTTGGAC CCCACCTGCT TTCTTTCTCT CCTGCCCTC 540
CCCTACTCTC ACTGTAATT ATGGACCCTG CCGCCTGCG TGTGTGTGT ATGTCCTGTG 600
CCTTTTCTCA CTATTGTTT GGTGTGGGAG GGGGTGGTTT TCACTGAAA AGGGGGGTAC 660
ACCTATAGCT TTCTTGATGT TCAATCAATC AGTCACTGTG TCCCAGACAT ATTCAATAAA 720
CACAGATTGG TACCATCTCG AG 742

```

(2) INFORMATION FOR SEQ ID NO:312:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

```

GCGATTGAAT TCTAGACCCG CCCCAGGAGC CTCCAGCTGC CTAACCACTG CCATTCTTTC 60
ACAACACGAT TTTCTACAAA TCTACAGCAC AACCGAGTTT GTAACCCGTG GGTAGTATG 120
AGGACCGGGT TCGTGACTC TCTGTATCTC CTCCTAAGCT TCGTCCAGG TTCTTTATT 180
TTGTCTGCTG CCAATGTCGT CTCGCATGCC TGCACCCTCG CATGCACGCT GCCCGCATGC 240
CACGTGCCAC GCTGTAGCCA CATCTCGAG 270

```

(2) INFORMATION FOR SEQ ID NO:313:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

```

GAATTCGGCC TTCATGGCCT AGTTGATGTC CTCTCATATT TTGTTGTTTA AATACGCAGT 60
GTGGTGGTTG TTATTTAGGA CTGCCTCTGC TCTGACAGAT GTGTCTACTC TACAGAGAGA 120
GAGAGAGACT GTGTCTATTG TCCCACCAGG CTGTCCAGAT CCAAACCTCA ATGACCTTTC 180
TGCACTCTGC CTGGCTATTG GTTACAGTTT ACATTCTACC TTCTCCCAAG GTATTGAGGG 240
AGGCTTGCAAT GCAATTCTCG AG 262

```

(2) INFORMATION FOR SEQ ID NO:314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCTAGA CCTGCCTCTC CTGACACGGG CCACCAAACC CCTTACCTGG TTCCTTGCTG 60

```

TAAAACTTCA CCAAATGAAG CCAGAGTTGA TCATGACCCT CTCGTGCTCG AATCCCTTCT	120
GGGCTCCCCT CTGCCCCCTG CAAAGCCCAC ATGATACCAC AGAGAAGACC TGTCCCCTGC	180
AGGCCAGCTG CTTCAGCCTC TTCCCTCACA CACATCGTCC CGCACACGGC AGCCACCATG	240
GACTCAACAT CCCCGACACA CGGTGCTGCC CTCTGCATGC ACCGACCCCC TGCCCCTCCC	300
ACCAGCTCGA G	311

(2) INFORMATION FOR SEQ ID NO:315:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 232 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

GAATTCGGCC TTCATGGCCT ACCTAGGTGC TTTTAAAT ATTCAGACAA ATATCTATCT	60
TACATTGATT AAACCCGTGT AAATCATTT GCAGTATCTA CATCGAATGT CAAAAAGTA	120
TACTTATTTT TGTTCCATAC TTATGTACAA TTTTCCCT CTCAGGCTT TTCATTAC	180
CTTTTGAAG AAGCACTTAC TCTCCCTTC CCTATCACC CATCCCCTCG AG	232

(2) INFORMATION FOR SEQ ID NO:316:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

GAATTCGGCC TTCATGGCCT ACAGTTGTTT AACTTCCTT TACAAATATA AAGATAGCTG	60
TTTAGGATAT TTTGTTACAT TTTGTAAAT TTTGAAATG CTAGTAATGT GTTTTCACCA	120
GCAAGTATTT GTTGCAAACT TAATGTCATT TTCCTAAGA TGGTTACAGC TATGTAACCT	180
GTATTATCTT GGACGGACAC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:317:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

GAATTCGGCC TTCATGGCCT AGGGCTTGTC TTTTTCATTG TTGAGTTGCA GGAGTCTTT	60
ACATATTCTG GATACTAGAC CCTCATCAGA TATGGTTTAA AAATACCTTC TCTATTCTT	120
TTCACTTTCA AGTATCCCTT TGATGCACAC ACCCAAAAAA GCAAATAGTG TCCAATTGCA	180
TTCTTTGATG AAGAAGAATA CAAGCAGTAA GTCAATTACA GCCTATTTT TCTTTTCTT	240
TCTTCTCTT TCTCTCTCTC TCTTCTTTC TTTGAGGCAG GTAGGCCATG AAGGCCGAA	299

(2) INFORMATION FOR SEQ ID NO:318:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 95 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

GAATTCTAGA CCTGCCTCGA GCTCCAGCTG CCAACACCCT TGGACACAAT ATTCCAGTCT	60
CCACTGCCCA TCTCATGTGG TTCAGGTTC TCGAG	95

(2) INFORMATION FOR SEQ ID NO:319:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 109 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

GATGCTTGGC TCACTCCCCG CTACTGGCCC CCAGACTTTT CCACCCAGG AAATGTCTCC	60
CCTGCCTGCA GCTTCAGCGA AAGCCCAGGA GGCAGGCCAA TCACTTGAG	109

(2) INFORMATION FOR SEQ ID NO:320:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

GAATTCGGCC TTCATGGCCT ACACATTTCT GTACCTGGAA AAAAAATGTA TCTTATTTTT	60
GATAATGGCT CTTAAATCTT TAAACACACA CACAAATCG TTCTTTACTT TCATTTTGAT	120
TCTTTTAAAT CTGTCTAGTT GTAAGTCTAA TATGATGCAT TTTAAGATGG AGTCCCTCCC	180
TCCTACTTCC CTCACTCCCT TTCTCCTTTG CTTATTTTTC CTACCTTCCC TTCCTCTTGT	240
CTCCCCACTC GAG	253

(2) INFORMATION FOR SEQ ID NO:321:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

```

GAATTCGGCC TTCATGGCCT AGGTTGTAAG TGATTTTATT TTTTCTTTTC TATTTTCCAG      60
TGTTTCTGTA ATGCTTTCAT ATTTCTTTTG GTAGTTAGAA AATAAAGGCT AATTTTAA      120
AAGAATATCA TAGTCTAAAA AATTAAAGGA TGCATAGAGT TCCCTCTTGA CTATGTGACA      180
TCTAAACTGA ATGAACTGTC TGCCTGGCAC AGTGGAACAG CGCAGTCTCA GGATTCTGAC      240
AGATTTTGG ATCCCAGCTC TACCACTAAC CTTGGGCAGG ATTTTAGTCC CTCTGAGACC      300
TGCTTTCTCG ATTGAATTCT AGACCTGCCT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

```

GAATTCGGCC TTCACCTAAA TACTCCTCCT TTTGTATCAT TCAGCCTTTT GTTTTAGTTT      60
GGTAAGTTT AAGAAATTTC AGCAGCAAAG TTGTTATTCA GTGGGCACGA TGGACTCCAA      120
ATGCCTCAAG TTATGTATAC CTGTGGAGGT CACGTACTTC CAAATTGTTT TCTTCCTCAT      180
CTTCTCCCTT TACCTGCACG CCCAGGTGCG CCAGCCGGGC CTCGAG                     226

```

(2) INFORMATION FOR SEQ ID NO:323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```

GAATTAAAAT AAACAAAAGG CAGCCAAGGA TGAAAGGATT TAGTTCTAAG ATGTTTCACA      60
GTTGTGATTT GTTTATTTTA ATCCTTAGTA GTAAATTAGT ACTAGAAGGA TCAGGTATAT      120
CTTCCTTAAT TCTTCCCAGG GGAGAGAAAG TCCCATTCTT CGAG                     164

```

(2) INFORMATION FOR SEQ ID NO:324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```

GAATTCGGCC TTCATGGCCT AAGCCTATGT TGATCTTGAA CTCCTGGGCT CAANCCNTCC      60
TCCTGTCTCG GCCTCCCAAA TTGCTGGAAT TATAAGCACA TTACACAGTG CCCAGTCTAC      120
CTACATTTTG ACAGACATAT AATATTCCAT GGCATGGTTA CATTATTGAG TTAAGAATGT      180
TCCCGGTTTT CTCTAAGATA ATGCTGCCCA TCTGTGCTC ACTCTGGACA TGTAAGATAC      240
CTGCAAGAC TTGGACTGCT TGAGCAGAGG GCCTGCTTTT GTTTTGTGTT CTTCCTGCCT      300
GTTGTAACCT GATGCTGCCA AATGATCCTC TTAATGATT GTACCACCTT CCCTGCCACC      360
ACCAGATTTT AAGGATTCTC TGTACCTCCC AACACATGAT GACATCATAC ATGAAAAGTT      420

```


TTGCCTGCCT GATGGAATAA TTGAGTCAAG AAATAGGATG CTAATGGCAT CTTGCGTTAC 480
CCGGTCTCCT CGAG 494

(2) INFORMATION FOR SEQ ID NO:325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

GAATTCGGCC TTCATGGCCT AGTTGGGTGT TGAGCTTGAA CGCTTCTTA ATTGGTGGCT 60
GCTTTTAGGC CTACTATGGG TGTAAATTT TTTACTCTCT CTACAAGGT TTTTCCTAGT 120
GTCCAAAGAG CTGTTCTCTT TTGGACTAAC AGTTGTCCTG ATGAATAATT TCATTTTCCT 180
CAAGTTTATG ACACTCGGAA CGTCAAGAAC TGGAGGTTTG TGCAATTGA GACCGGTCGG 240
CACTGTGCAG AGATCAGAGT ACTAAGAGAC AGAGATTAAA ATGGCTATCC TCGAG 295

(2) INFORMATION FOR SEQ ID NO:326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

GAATTCGGCC TTCATGGCCT ACAAGGATAG AATTCATTCC ACCTATATGT ACTTAGCAGG 60
GAGTATTGGT TTAACAGCTT TGTCTGCCAT AGCAATCAGC AGAACGCCTG TTCTCATGAA 120
CTTCATGATG AGAGGCTCTT GGGTGACAAT TGGTGTGACC TTTGCAGCCA TGTTTGGAGC 180
TGGAATGCTG GTACGATCAA TACCATATGA CCAGAGCCCA GGCCCAAAGC ATCTTGCTTG 240
GTTGCTACAT TCTGGTGTGA TGGGTGCAGT GGTGGCTCCT CTGACAATAT TAGGGGGTCC 300
TCTTCTCATC AGAGCTGCAT GGTACACAGC TGGCATTGTG GGAGGCCTCT CCACTGTGGC 360
CATGTGTGCG CCCAGTGAAA AGTTTCTGAA CATGGGTGCA CCCAGGGAG TGCTCGAG 418

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC TTCATGGCCT ACAGACATCT AATCGGAATC TTGCTCTTGT TGCCAGGCT 60
GGAGTGTAAT GGCACAATCT CGGCTTACTG CAACCTCTGC CTCCTGGATT CAAGTGATTG 120
TCCTGCCTCA GCCTCCCAAG TANTCTGGAT TACAGCCCTG AAAACCACTC GCTTGCAGAG 180
CGCTGGATCA GCAATGCCTA CTAGTCTTTC ATTCAAACAC CGGATTAAAG AGCAGGAAGA 240
CTACATCCGA GATTGGACTG CTCATCGAGA AGAGATAGCC AGGATCAGCC AAGATCTTGC 300
TCTCATTGCT CGGGAGATCA ACGATGTAGC AGGAGAGATA GATTCACTGA CTTTCATCAGG 360

CACTGCCCT	AGTACCACAG	TAAGCACTGC	TGCCACCACC	CCTGGCTCTG	CCATAGACAC	420
TAGAGAAGAG	TTGGTTGATC	GTGTTTTTGA	TGAAAGCTCA	ACTTCCAAAA	GATTCCTCCA	480
TTAGTTTATT	CCAAAACACC	AGAAGGAAAC	AACGGTCGAT	CTGGTGATCC	AAGACCTCAA	540
GCAGCAGAGC	CTCCCGATCA	CTTAACAATT	ACAATGCGGG	AACTCGAG		588

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

GAATTCGGCC	TTTATGGCCT	ACGACTGGGG	GAAATGTCTA	TTCTCCTGTG	TATCTCTGGG	60
CTTTTCTTGT	TTTTGGCTGC	CTCCTGCTCA	GTTCTCTCTT	TTAGGTATTT	AGTAAAGCGT	120
TCATGTAAATG	TCATTCCTGA	GGACCCAAAG	TGATGCTCTT	TAACATGGTG	AACAATGGTC	180
ACTATATGTT	GGGCAACAG	TTCTGAGGGG	CTACGCTGAG	ACTGAGCTGA	TTGTATGTGC	240
TGGAAAATGG	AACGAAATC	CTGTTCTTTT	TTGTTGCTAT	GGACTAGATC	TCGGCAAAGC	300
TTGCGTTTCT	GAGCCAATAA	GCCACTGGGT	CGTGCGAGGT	CCTCATCAAA	AGAGTCCATC	360
CGGACATTGA	CCTGTGCCTC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

GAATTCGGCC	TTTATGGCCT	AGCAGTTCAC	CACTGCAAAA	CCACGGGGCT	GCGTGAGGT	60
ATTCATGGGA	CACCGAGTGG	TATCACTAGC	AGCGGACTCT	GCATGCTTAC	TTAGAGCATA	120
AAAGGATAGC	ACCCTTGCC	ATTGCCTGAC	ATGAACTCAG	TTTGGAATTT	GCAGAGGTGT	180
GGAGAGCCAT	GGATGGGTTT	TATAATTTAT	TCTAATGTAA	TCTCTGTGCT	AAAGGCTGTT	240
TGAAAAAAT	AATGAAGTTG	ATGTTGCTTA	AGTTATATGC	AAATGTAAAC	TGGTCTTCCT	300
TCAAGATGTT	TGGAATGGAA	TGAATGCCCT	TCCCCTGGGT	ACCTCCCAAT	ACCTACCCTC	360
AAAAGAGCTC	CAGTAAGGCT	TCCTTATCTT	TCCTTGCCCT	GCTTCCTACA	CTGCTGCTGC	420
AGGTGTCTCT	GGGTGATTGT	GGGGGAAACC	ACTGTGGTTA	AGCACCAACA	CCAAGACTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

```

GAATTCGGCC TTCATGGCCT AAGGCCTTGG TGCCCTGTGG GTGGACTCTG GGGAGGCCAG      60
GGGCCCAAGG CCACCTTCTA GGGCCTGAGG AGCCCTCTGA GACCTGCACA CCCACCCAG      120
GGAGCGCCCC TCCCTCCACC TCTGTGCCCC CCCAGTGACT CTCGAACCTC TGTCTGTTT      180
GCAGATTCAT CCGGAAGGGC CGCCAGCCAG TGGATTTCCC GGGCCCTCAG CCCTCTGGAG      240
TGTACGAGTT TTGGAGAAAC CTCTCTCTCT GTATATGCTT TTGACTTTCC TGGACTGATG      300
TAAAAAATACT CTTTCTTTG ACCTGTTTAT TTTTAAGACA CGACGTGATT GTGTCAGCTT      360
ATATTTTATT GCTGAAGTAA ATTTTCAAAT GTTTTATTAG TTTTTTTGA TCTTTGTCTG      420
CTCATTTTGG AGTTTGTGA ATTTTGATAG GTGTTCTTTT ATGCTTTGTA TTGTTTCTT      480
AATGACTTTT ACCTTAGTTT TTAACAAACC CATAGTACAG TGTACCCTCG AG              532

```

(2) INFORMATION FOR SEQ ID NO:331:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 375 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

```

GAATTCGGCC TTCATGGCCT ACATTTTGG AAAAAAAAAA ATCTACTTTG TGTATGTGTG      60
GGGTGTGGGG TGTGAGAGAT ACATTCCTTT TTNGTGTCTA AATCTCACAG TCCACATATG      120
ACTTTCCCCA CTTGAGAATT CTCTCTCATC TGTGTGGCTC CCTGCATTCT ATAAAAATAT      180
AAATAAATAA AATTTTAAAA AGTATAAAGC CGGTGCCATG AGACCCTTGG GTTGGGCAAA      240
GCCTGTGAAG TTTGAACCGG TTAACGCACG AATACAAGGG AGTGATTATT ACAAGGCCAT      300
CCCGCTTAGC ATCGGGGAAT CATTTGGGGA GAGAGATTCA ATTCATAAA GATGATTTTC      360
AAGGGCTGTC TCGAG              375

```

(2) INFORMATION FOR SEQ ID NO:332:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

```

GAATTCGGCC TTCATGGCCT ACACGCGGTC AACTCTGCAG GGCTGATGAT AAACATGCCT      60
CTTCTCCTAT TGTCCCTTCT CTCTCTAAAG CAAGGTCATT TCTGTGCTCG TCAGGCAGTG      120
GCAGGGGTTG GGAGGAGGAG AGAGGGAAAC ACTGTGGTCA GGCTCTGGGG AGAGTTGACT      180
ACAGTGTAGC TCTTGATTA TTTATGAATA TTGCCCTCAG ATTTATTTTC ACTCTGCTCC      240
TTCCATTCAT ATTCCAGAG ACAACCAAGA GCCGACTGTA GAAAAAGACT TCCAGACACC      300
TAGAATATAT ATCAATAGAC ACTGTTTAAA AGGGGAGACT CGAG              344

```

(2) INFORMATION FOR SEQ ID NO:333:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 422 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

```

TGGCCTAAAG GGGGTGGGTA CTCCGGTGGG GTAAGGTCAG AAGGTCCTG TGCAGGGAGG      60
GACTGGTCCC TTGAGAAGGA ACAGAGGGCA AATCCTGAAG AGTCCTGGAG GCCCAATGTA      120
GACAGCAGAA GCTGGGAGCT GACCTAGGAG TGATCGGGGG CCTGATCCAG ACAGGACAGA      180
CACAGGCTGA CACCGGAGAG TCCAGGTGC CAACATGAAC AGTTAAGGCA GGGGCTGACC      240
CCAAAGAAAT CAGGGGCCCG CAGCTGACCC CGGAGGGTCC CAGGTGCCGA CCTAGACAGC      300
AAAGGCAGGG CTGACCCAG AGGGTCCCGA GCCGACCCAG ACGACACAGG CAGGGCTGAT      360
CCCGGAGGGC CCCGCCCGA CCCGGACAGG CAGTGAAGGC ACAGGCAGGG CTGACACTCG      420
AG                                                                                   422

```

(2) INFORMATION FOR SEQ ID NO:334:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

```

GGGAACGAAA GATGGCGGCG GAAACGCTGC TGTCCAGTTT GTTAGGACTG CTGCTTCTGG      60
GACTCCTGTT ACCCGCAAGT CTGACCGGCG GTGTCGGGAG CCTGAACCTG GAGGAGCTGA      120
GTGAGATGCG TTATGGGATC GAGATCCTGC CGTTGCCTGT CATGGGAGGG CAGAGCCAAT      180
CTTCGGACGT GGTGATTGTC TCCTCTAAGT ACAAACAGCG CTATGAGTGT CGCCTGCCAG      240
CTGGAGCTAT TCACTTCCAG CGTGAAAGGG AGGAGGAAAC ACCTGCTTAC CAAGGGCTCG      300
GGATCCCTGA GTTGTGAGC CACCTCGAG                                                                                   329

```

(2) INFORMATION FOR SEQ ID NO:335:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

```

GAATTCGGCC TTCATGGCCT AAAACAGATA ACGCTATAGA GAAACACTG TTTACTGAAC      60
AGTGCTTGA AACACGAGG GTGATCAGAG CCCCATTTG CCTTCTAGAG ATAAACCTGT      120
CTCCCTTCCT GCAGAGCTAG CTCCTCCTAT TGCTTCTGGT TGTCGTTTGT CTTAGTCTG      180
CTTCCTGCCA GTGCAGCAGC TCCTGCTAGA TCTTGACATC CTAGTGGCCA GATCCCAGGG      240
GCGGTGCTGG TCCTATCCGA GCTCTCTGCC TCATCTCCCA TTCCTTTTTT CCACACTCAG      300
TGTGTATTCT CTTGGATTTC CATACCCTGT TCCTCCTACC ATCCACCTCT CTACCTCATC      360
TCCCGACCTG CCTCGAG                                                                                   377

```

(2) INFORMATION FOR SEQ ID NO:336:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 356 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

```

GAATTCGGCC TTCATGGCCT AGCAGGTCAG GAGCCCGGGG AAGGCCCAGA GGTACTCCAA      60
AGGGGGCCCG CTGGTATCTG AAGGCCCTT GCAGTTAGTG TGTGTTGAG CTGTGGGCAT      120
GAACATGCCA CAGGCAGACA CTGTTTAGCC AGGGTTTAA GAAACACGGA GGGTCCTGTG      180
GATCTGGAGT TCATTTGTCA GGACAGGGAT GGGGACCCCT CTGAAGTATT CACTGTGGGC      240
TGAGGGGTGC TGGCCACACA ACCTCTGTGG GAGGCATCTC TTGCAGTGAA GCTGTTGGTC      300
CTCAGTTCAG TGCCCACTGA GGGTAACCAG GCCCCAGCTC TGCACCCCA CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

```

GAATTCTAGA CCTGCCGAG CACAATCCCG TGGACAGAGC TTACTCCATC TAACTCGTTT      60
TCAAGTGCAAT GATTTTCACT TTCACTTTTC CTTTTCCTT ATTATGTTGC TTAAGTTGTA      120
CAGTGGCAAC TGAAATGCAT TTCAGAAATA GGAGGTTTCG TCCAGCACCC TCTGCAGCCT      180
TGGTGCCTGT AGCTCTGGAC TTCCTGGGC CTTCCCTGT GGGAGGGCCC TGTAGACCAC      240
ATCAGGGTGG GGTGGGGGTC ACTTGGCAAA AAGGGCCGAG GTCTGGTGAT GTGGTTCCCA      300
GGATCTGGAA CCTCTCCAC CCCTCCTGCA GTTGACTGA ATTCTTCCTT TTCATCCGAA      360
GAAACCCACT TGCTGTTTCC AGCCAACGAG AG      392

```

(2) INFORMATION FOR SEQ ID NO:338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

```

GCAAGATGGC GACCGAGACG GTGGAGCTCC ATAAGCTAAA GCTTGCCGAA CTAAAGCAAG      60
AATGTCTTGC TCGTGGTTTG GAGACCAAGG GAATAAAGCA AGATCTTATC CACAGACTCC      120
AGGCATATCT TGAAGAACAT GCTGAAGAGG AGGCAAATGA AGAAGATGTA CTGGGAGATG      180
AAACAGAGGA AGAAGAAACA AAGCCATTG AGCTCCCTGT CAAAGAGGAA GAACCCCTG      240
AAAAAACTGT TGATGTGGCT CTCGAG      266

```

(2) INFORMATION FOR SEQ ID NO:339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

```

GAATTCGGCC TTCATGGCCT AAACAATGAA TAAAGCCAAG CCAGTTCCTG CCCCCGTGGA      60

```

```

GCTTGTAGTC AAGACATTGA ACAAGTGATC AGAAAGATGT TGACTGCTGC AGCAGAGGGT    120
TGCAAGCTGC TCATGAGTAT ATAACAAGTA GCCCTAACCA AAGCATTCTC TCCCTTGGTT    180
TAATGTCCAC CCATTGAGGT GACTGCTAAA TACTAATCCA TGACTCTATC CCTTGGCATT    240
CAAAC TCACA CATCCACTTA CCTGCCTCTC CAACCTCCCT GCCTCGAG                288

```

(2) INFORMATION FOR SEQ ID NO:340:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 313 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

```

GAATTCGGCC TTCATGGCCT AGTCTCTGCC ATGTTCTAAA CTGAAAACCT CCTAGTCAAC    60
TTCACACTTT ATTCCCTGAT CCTCAATTGG TTCCCATGTC CCGTTAGTGT TTCTTGTAAG    120
CCTCTGCCAC CACCGCAGAT CGAACTCTAA TCACATCTCA CCTGAATTAT GGAAAAGTCA    180
CCTCAATTCT CTCACCCATC CCAGCCTCCA CTATGGATTA ATATGCCTAA AGCAGAGCTG    240
ACCACAACGG TGAGAAGAAT CTGAGAGGGA AGCAGCAGCA AACACAAGAG TCACTGGACA    300
TGCATGCCTC GAG                                                         313

```

(2) INFORMATION FOR SEQ ID NO:341:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

```

GAATTCGGCC TTCATGGCCT AAGAAAAAG GATAGACAAA TAGTATTTT GTGATTTTAC    60
AGTAGCTTAA AACTATAGGA TTTTTCCTCC CCATTACTTT GCAACAAC TG ATACTTTTGA    120
CCAGTTCTCT TTCCTAAGCA TTTCTCTCCT TGAGCTATTA CCCAAATTGT CCTAGTTCTT    180
CTCTGCTTGT CCCTCAGCTA TACACAGTCA CTGAGGCTCT GTGCTTGGCT TCTGTTCCCT    240
TCTCCTCATA GGGATTCTCT ATGTTGGAGT TCATCAAGCT CGAG                284

```

(2) INFORMATION FOR SEQ ID NO:342:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

```

GAATTCGGCC TTCATGGCCT ACCACGATAG ACCAGCTGTA GCTCATTCCA GCCTGTACCT    60
TGGATGAGGG GTAGCCTCCC ACTGCATCCC ATCCTGAATA TCCTTTGCAA CTCCCCAAGA    120
GTGCTTATTT AAGTGTTAAT ACTTTTAAGA GAACTGCGAC GATTAATTGT GGATCTCCCC    180
CTGCCCAT TG CCTGCTTGAG GGGCACCAC ACTCCAGCCC AGAAGGAAAG GGGGGCAGCT    240
CAGTGGCCCC AAGAGGGAGC TGATATCATG AGGATAACAT TGGCGGGAGG GGAGTTAACT    300

```

GGCAGGGCAC TCGAG

315

(2) INFORMATION FOR SEQ ID NO:343:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

GAATTCGGCC TTCATGGCCT AAAGATGTTA GATATTACAA TTTGACTGAA GAACAGAAGG	60
CGATCAAGGC CAAGTATCCG CCAGTCAATA GGAAGTACGA GTGTGAGAGA TGAATTACAG	120
TCTCTTCTGT TTCACCTTTT GGATGAATGG CTTTATAAGT TCAAGTCTGA TGAATTCTTC	180
ATACCCCGGG TGGGGAGAAG AATTTTCATT GTCCAAGCAC CCTCAGGGAA CAGAAGTCAA	240
AGCAATAACA TATTCAGCAA TGCAGGTCTA TAATGAAGAG AACCCG	286

(2) INFORMATION FOR SEQ ID NO:344:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 545 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

GAATTCGGCC TTCATGGCCT ACCTCTGTGA AAATTTAATT TTTTATATCC TGATTAATAT	60
ATTGTGACTT TAGGCCCAT TTTTCATGTGC TTCACCTTGA TAGAGTTAAT CCATAAAATT	120
GCTCTTTACT TTAGCTTATC AAATGAAGTA TTATTTTGTG GACTGGAGGC CAAAAAGTCA	180
ATGTGAGCTT CTCACAGGTT TTTAAAGCTC CACTAAAAAT AATTATCCAC TTGTCTTTAC	240
TTTTGTTGAC CAGAATAGTT GGTAAGCTG CCAGAGCCTG TACTTACCTG CCAAAAACAA	300
TTAAATCTGG TTAATGCCTG AAACCAAATC TCTCAGTCTC AAGTGTTATA CTATCCAAGT	360
TTTAAATGGA AAGGTAAACT GTGGAGTAAT GAAATTTTGG TTTTACTGTA CCTTTTGCTA	420
TCAAGATAAT ATTCATGTTT GAAATCTTGT CTTTATTTGG AATTAGTTA CTGTCTGCTT	480
TTAACCTTTG CTTTCCTAAA GAAAGTTTGA GATCCAGAGA GTTCAAGGGA TCGGGGAGTC	540
TCGAG	545

(2) INFORMATION FOR SEQ ID NO:345:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

GAATTCGGCC TTCATGGCCT ACAATAAGTG TGTTATACTT GCTTTGGTGA TTGCAATCAG	60
CATGGGATTT GGCCATTTCT ATGGCACAAT TCAGATTCAG AAGCGTCAAC AGTTAGTCAG	120
AAAGATACAT GAAGATGAAT TGAATGATAT GAAGGATTAT CTTTCCCAGT GTCAACAGGA	180
ACAAGAATCT TTTATAGATT ATAAGTCATT GAAAGAAAAT CTGCAAGGT GTTGGACACT	240

TACTGAAGCA GAGAAGATGT CCTTTGAAAC TCAGAAAACG AACCTTGCTA CAGAACTCGA 300
G 301

(2) INFORMATION FOR SEQ ID NO:346:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 447 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

GAATTCGGCC TTCATGGCCT ACACATTTTG ACAGCTTCCT TTCAGGTTTC TTGAGCTCTC 60
 AGAAAAATTA GAAGGAAGTG GGCTGGGGAT ATAGAGAGAG TCCAACTAC CAACTAATGA 120
 ATGAATCTGA AGGAGACACA GAAGGGCAAG TAGAGTTTAG AGTTTGAGAG TGCAGGAAAG 180
 TTTTGAAATG GTCAGAACTG CCAGAGTAAT TTCTGAGATC TTTACTAAGCA CTCTCCACC 240
 GTTTGCCTTA AAGATACCCC TTCCCCCAA TTGAAACATC ACAAATCTGC AGAGCTCTTT 300
 AATCAGGTGT GTTATACACA ATGAATTTAA TTCTCTTATT GCCCTGGAAG AAAGATAAAC 360
 CAGATGTGGC CCTTGCCCTT TTTCAGTAAG TATTTGTAG ATCTTCATTA CATTTTAGGC 420
 CTCCTAGGCC ATGAAGGCCG GCCTTCA 447

(2) INFORMATION FOR SEQ ID NO:347:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 297 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GAATTCGGCC TTCATGGCCT AAAATTCGGC TGATTTCCCC CTGGCTAGC CCAGCTGACG 60
 GAGTCAAGAG CAAACCAAGA AAAACTACAG AAGTGACAGG AACAGGTCTT GGAAGGAACA 120
 GAAAGAACT GTCTTCCTAT CCAAAGCAA TTTTACGCAG AAAAATGCTG TAATTTCTTG 180
 GGAAGATTTT AATGTACACC TATTTGTAAA GTCATCAGAA TAGTGTGGAT TATTAATAT 240
 CTAGTTTGGA AGAAAATAAT TTATATAAAT TATTGTAAAT TTTTATGTAA ACTCGAG 297

(2) INFORMATION FOR SEQ ID NO:348:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 241 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT AGAATAAAAC AAAGCCTTTT CTGCCTTTTA CATTAGTTT 60
 AGTAACCGTC AACACCCAC CCATATACTC CCATACCATG AGGTGTAAT TTCAAACCTC 120
 TCGCATACTT TTAATTACTA GTTTAATTAT TTGCCTTCTC ACTGAGTCTA TAATCTCACT 180
 TAGGGTAAGA ACAGAACTCA ATTACAGATG CTCAGTAAAC ACTGGAAGGC CGCGGCTCGA 240
 G 241

(2) INFORMATION FOR SEQ ID NO:349:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 172 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

```

GAATTCGGCC TTCATGGCCT AGGGCTGCCC AAGATTGTGA AAGGTAAGTA GTATCTTTAT      60
TTGGGGGTAA CTTAATTATA GATAAAAGAT GGTCCAATAC TGGAAACTGT TCGTTTCTTC      120
CCTTGGATCT AGTCTTCTTC TGCTTTATAT AGAATCCCAC CATCATCTCG AG              172

```

(2) INFORMATION FOR SEQ ID NO:350:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

```

GAATTCGGCC TTCATGGCCT ACACGTGACA GCCTTTCCTT TTTTCAGATCA CCTTCCTCAC      60
ACTGATGGTC TCATACAACA TCATTTTGAA TGTCCTCAGC TCTCTGCACC ACCCACCCAA      120
CTCCACTCTG GGCCACCGCT GGTGTATCCA AGATCAGGAC ACCAGTCCCT GGGCACCAGG      180
GAGTATGCTG GCCACTGAAG CAGCTTCGTT TTTCCGGCAC CCATGTTGTA AAATCGACTC      240
CCCCAAACTC GAG              253

```

(2) INFORMATION FOR SEQ ID NO:351:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 240 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

```

GAATTCGGCC TTCATGGCCT AGAAAGTTTA AAGATTAGCG TACTGATTAT GATGGGATTT      60
TTACTGAAAA TTAGTTTGTG CAGGCTGCTT GCTTGTCTGT GTATTTTCTA TTCTAATTTA      120
GTTTTTATTT TTATCAAAGC TGTATTTACT TATAATGTAA AAAGTCAATT AGTTTTCCAA      180
GGCTTATTAT GGAAAACAGT AGTCCCCAG GCTCCCATCC CTATGTCCAA CAAACTCGAG      240

```

(2) INFORMATION FOR SEQ ID NO:352:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

```
GAATTCGGCC TTCATGGCCT AGACCTGCCT CTAAGCCTTT GATTATTCAG CTGCCACTGC      60
CTACAGGCCT TCTCCCATAT TCCTTCCTTC TTGCTAAGTC TGACTTAAAC TAGGCTTAGG      120
CACCAACTCC TATAGGAAGC CTTCCCTTGAA CCTGGCCCTC TACTTTTCAC TCACTGACTA      180
CCACTCAATT AACTGAACGG TGAAAAGTAA CCCACAGCTA CGCATTTCATG CAGACAACAG      240
AATTTTACTA CTTCTTCTCA CTACTGGTTC ATATTTCTGC AACCAGAAAA TATCATTTC      300
TCCCTAGTAA CTATGGCTTC CATCTGTTAC TTCC                                     334
```

(2) INFORMATION FOR SEQ ID NO:353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 92 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

```
GAATTCGGCC TTCATGGCCT AATAATGACT TGTGGTTGA TTGTAGATAT TGGGCTGTTA      60
ATTGTCAGTT CAGTAGGCCA TGAAGGCCGA AG                                     92
```

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

```
GAATTCAGTT CCTTATATAT TCTAGTTATT AATCCCTTAT CAGGTGGATA GTTTGCAGAT      60
ATCTTCTCCC ATTCTTTAGG TTGTCTCTTC ACTCTGTTGA TCGTTTCCTT TGCTCTGCAA      120
AAGCTTTGTA GCTTGAGATA ATCCCATTTG TCTGTTTTTG CTTTGTGTTG CTATGCTTTT      180
GAGGTCTTAC TCAAAAATT TTTGCCAGA CCAGTACCCT TGAAGCATTG CCCCATGGT      240
TTTTTTTTTT AGTCATTTC TAGTTCAGGT CTTACTCGAG                               280
```

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

```
GAATTCGGCC TCCATGGCCT ACATAGATGG GCACACTCAC ACACAGAAGT GTGCTTGTTAC      60
AATCACCACA CAGCACAAA CACACACACA CACTAAAAAT ATAAACACA TGCGTCACAT      120
```

```

GGGCATTTCA GATGATCAGC TCTGTATCTG GTTAAGTCGG TTGCTGGGAT GCACCCCTGCA    180
CTAGAGCTGA AAGGAAATTG GACCTCCATG CAGCCCTGAC AGGTTGTGGG CCCGGGCCCCT    240
CCCTTTGTGC TTTGTATCTG CAGCTCTTGC GCCTTTTATA AGTCCATCCT AGTCCCTGCT    300
GGATGGCAGG GGGCTGGATG GGGGGCAGGA CTAATACTGA GTGATTGCAG AGTGCTTTAT    360
GAATTCACCT TATTTTATCG AAACCCATTG GACTCGAG                                398

```

(2) INFORMATION FOR SEQ ID NO:356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

```

GTGTCAGAGC AGGCATTTCC CAACCTAAGG AAATCTTTGT TTTCAAATAT TAGGGTTTTT    60
TTTTAATTGT GGTAAAGGA TTTTGGACAT GCTTTGTAAA TTGTTAGTAA AAGGACCTAT    120
TTTCCACCTG TATTCTAAGT TATTTTTCCT CCTCTTTTGT AATTTTTCAG GTCAGCCCTT    180
CATAAACCCA GATGGGAGTC CAGTTGTGTA TAATCCTCCT ATGACTCAAC AACCAGTTAG    240
ATCCCAAGTG CCTGGACCTC CACAGCCACC TCTGCCAGCC CCACCTCAAC AACCAGCAGC    300
TAATCACATT TTCTCACAGG CGCATCTCGA G                                331

```

(2) INFORMATION FOR SEQ ID NO:357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```

GCTGCCTCGA GGTCTCCAAG ACTTTTTCAT CTCGTATCGT TTCGGGATCC GTATCCATAC    60
TTTTATTTCCT ACTTCTTCC TCTTCCTCCT CGAACTCCTC GTCGCCATCC TGTCTGCCCCA    120
GCTTCCCGTA GCCATCCTCG CCTTCTTCTT CGTGCTCCTT CTCGCTCTCG CCATCCCTCG    180
GCATACTCTC CCTTCTCCTC TCGAG                                205

```

(2) INFORMATION FOR SEQ ID NO:358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```

CAAAAGAGAT GGTACCAGCA AGAGATTAAT ACTAAAGAAA TGCAGTCAGA TTTTAAAGAA    60
ACTGGAAGAA GAGCCATTTC TCCCAGGGAG AAGATTCTAG ATGTGATTGA TGACACCATA    120
GAAATGGAGA CAGGTCTGAA AGCAATGGGA AGAGAGATTT GTCTAAGGGA GAAGACGCCA    180
GAGGTGATTG ATGCCACTGA GGAAATAGAC AAAGATTGGG AAGAAGCTGG AAGAAGAGAA    240
ATATCCCCAC AGAAAAATGG CCCAGAGGAG GTTAAGCCTC TAGGTGAAGT GGAGACAGAT    300

```

TTGAAAGCAA	CTGGATATGA	GAGTTCCCCA	AGGGAGAAGA	CACCAGAGGT	GA CTGATGCC	360
ACTGAGGAAA	TAGACAAAAA	TTTGGAAGAA	ACTGGAAGAA	GAAAAATATC	CCCAAGGGAA	420
AATGGCCCAG	AGGAGGTCAA	GCCTGTAGAT	GAAATGGAGA	CAGATTTGAA	CGCAACTGGA	480
AGAGAGAGTT	CTCCAAGGGA	GAAGACACCA	GAGGTGATTG	ATGCTACTGA	GGAAATAGAT	540
TTGGAAGAAA	CTGAAAGAGA	AGTATCCCCA	CAGGAAAAC	CGAG		584

(2) INFORMATION FOR SEQ ID NO:359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

GAATTCGGCC	TTCATGGCCT	ATGCTTTCTG	AATTGGCAAG	ATATTCCAGG	CTTATTGGC	60
ATTCATCTTA	CTCTAGACCT	ATTATCAACC	ATGCTCTCAA	GGATAAGTAG	ATCCTTTTAA	120
GGGAAAATGG	TATTTTGAAA	GCATAGTGTG	GGATCTGAGG	ATACCTATTC	CTGTCAGGTT	180
GGTTATTGTT	TGTTTTCAGT	GAGTAGATCT	TGGACTTTAT	TAATTTTATT	TATTTATTTT	240
AAGAAAAGTA	CATCATGAGT	TATAAGTAAT	AATTCCAAC	CAAATTTTAA	TATTGCTTAA	300
CTCCTTTGAT	TTTATATTA	TCTTTTACAC	TGAAAAGTCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

GCGGGTGGAC	AAAAATGAAG	CCAATGAAGA	AGGCATGCAC	TGGCCTTTCA	GGTCCTGGCA	60
GTGGCAGCAA	GTCCCCCCCA	GCCACCAGGG	CCAAGGCTCT	GAGGCGGCGA	GGGGCTGGGG	120
AGGGTGACAA	GCCAGAGGAG	GAGGATGACG	AGGCACAGCA	GCCGCAACCA	CAGTCCGGGC	180
CCGAAGAGGC	TGAGGAAGGG	GAGGAGGAGG	AGGCTGAGCG	GGGCCCTGGG	GCTGAAGGTC	240
CTCCACTGGA	GCTGCACCCT	GGCGACCCGG	CTCCAGGCC	AGCAGAGGAC	CCCAAAGGGG	300
ATGGGGAGGC	AGGCCGCTGG	GAGCCCTCAC	TCAGCCGCAA	GACAGCCCCG	TTCAGTCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

GCACCACCTC	TTGCACTGTG	AGGAGTTTAT	TGATGAATTC	AATGGGCTGC	ACATGTCCAA	60
GGACAAGAGG	ATCAAGTCAG	GGAAGCAGTC	CAGTACCTCC	AAGCTGCTGC	GTGACAGTCG	120

```

AGGCCCGTCG GTTGAGAAAC TGTCCACAG ACCTTCAGAT CCTGGAAAGA GCAAGGGGAC    180
CTCCCATAAA CGGAAGCGAA TTAACCCCTCC CCTGGCCAAG CCAAAAAAAG GTTATTCAGG    240
CAAGCCCTCT TCAGGAGGTG ACAGGGCCAC CAAGACGGTG TCTTACAGGA CTACCCCCAG    300
TGGTTTGCAA ATAATGCCCC TGAAAAAGTC TCAGAACGGG ATGGAAAAATG GGGACGCCGG    360
CTCTGTAAGG ACCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GATTGTATTG AAAGTCAGAC ATAGGTGTGG AACCAGTTAT GGGAGTGAGG ATAAGTCTAG    60
ATTTGGGAAT CAGTCGCAGA GAGGTGGACG ATGAAAGTCT GAGAAGAAAG GATCTTGCTA    120
ATGGAGTGAA CTCAGAGCTT GATAAAGGGA GGATGAGTGG AAATGGAGCT CAACGCTGTG    180
CCTTGGGAAA TACCTCTGTG GATTGGTGGG AGCACAGTGA GAAATTCAAG AAAGACACAG    240
ACAAATGGAAT AACCAGAGAA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

GAATTCTAGA CCTGCCTCGA GCATTGCCCC CGGCCTAAGA AGCTCTCTTA TCTTGCATCT    60
TGGGCTGGAC TCCTACAACA GCCACAACCT CCGTGCTGGT CTCCAGCTT CTAGCCTTCC    120
CCCATCTCCT GTCGTTTTTC ACACAGCAGC CAGAAGGATC CTTTAAAAAC AGAGGTTGAT    180
CCTGTCGTTT CTCAAAATCC TCCAATGCTT TTCCTACTGC ACTCAGAGTA AAAGCCAGTC    240
TCTGCCTTAG ATGCTCTGGG ATCCTGTACC CTCTTGGTTC TCATGTCCTA CAATCTGCAT    300
TCTGGCCATA ATGGTCTTCT CTGCTGTTCC TTGAACATTC CAGGAACATT CCCCCATAC    360
CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT ACTGGGTTCT GAGAAGCAGT GGCCCGAGCT GAAGCATCCA    60
GACAATGAGT GTTCAGAAGC TGCCAGATTC TCACCTAGCC TTAGAAGTAA CACAGCCACA    120
TTCTGTCCGT TACAAACACA TTTCTAAGGC CAGTCCAGAT TCAAACGGAG GGCAATTAGA    180

```

TTTGACCCCT TGATGAAGGA GGGCAAGGTT AACTGAAAA ACAGCATAGG GACTGGGAGA	240
TATTATGATG TCCATTTTGG GAAAATCTGC CACAGACACA GTGAAGACAG AGAGCCCTTC	300
TCTCTGATCG AGGACCTCCA GAATGATCTG CTGAGTCACT CAGGTATGCT GGACCATTCA	360
CACTCACCCC GGAAAAGCTC GAG	383

(2) INFORMATION FOR SEQ ID NO:365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

GAGGTTTACA GGTTAAGCA TTTGTTTTTA CAAAAAGGAA TGGGATATGG GGGTGGTCAA	60
GTTTTACGGG TAATAACAAC ATTCTCTCTA GATGGCAGGG GGTAAGTCTG CCTGTCCTCC	120
ATTGCTGGTA CCACATAAGG GATACATTAG TAAAGTAGGG AAAGGGTCAT ATGTGTGGTT	180
GACCTGTTCT TCAGAGAGGA ACGTGGGATG GTATCTGCTG TGTACCTGTC TCAGACCAAA	240
CCTGGGGGTG GACCAGTGCC CCTTCTTCT CAGCCTTCTT CCACAGCCTG ACTGTACTGC	300
CACCCGCACC CATGAGAAGG AGGTNNTGAA GGAAGCTTGA GGACATCCAC CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

GAATTCGGCC TTCATGGCCT ACAACCATTTG AAAAAATATA GACTTAGAAA ACGAAAGTTC	60
CCCTTAATCA CAAAGAACCA CAGTTGACAG GGTGATAGA TGTTTTTCA GATTTTTTTT	120
TTCATATGTC TGCTATCTTT CCCCACAGGA ACTGGGTTTT ATTTTAGGTG TTGTTTTGCA	180
ACCTCTGTTT TTCAGTTGCC AGTTTATCTC AGACATTGTC CTATGTCAGT ACAGGCCCAT	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

GAATTCGGCC TTCATGGCCT ACAAAAAAAC AACTTTCCAG TGGCTTCTCA CTGCTCTGAG	60
AATAAACTCC AGGCTCTTCC ATTGCAACCA ACAGGATCTG GTGATTGAC CCCAGCCCCT	120
CTTCCAGGC CCTCATCACC TTGATCCTCC CTTAACCTAT CCTGCTCCAG CTGCACTGGC	180
TGCCTTCTA TTCCTCCAGC ATACCAAGAT TGTTTCTGCC ACAGGGCCGC CACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:368:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

```
GAATTCGGCC TTCATGGCCT AGTTTTTCT ACTCCTACAA GTGTAAATTG AAAAATCTTT      60
ATATTAAAAA AGTAACTGT TATGAAGCTG CTATGTACTA ATAATACTTT GCTTGCCAAA      120
GTGTTTGGGT TTTGTTGTTG TTTGTTGTTT TGTTTGTGTT TGGTTCATGA ACAACAGTGT      180
CTAGAAACCC ATTTTGAAAG TGGAAAATTA TTAAGTCACC TATCACTCGA G                231
```

(2) INFORMATION FOR SEQ ID NO:369:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 277 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

```
GAATTCGGCC TTCATGGCCT ACTTGGTCTT CTGCACTTTT GTCTCTGACG TACTTCCTTT      60
CTTCACAAGT GCCATTACAA GAAAGCTGGG CTAAACCAT TCCCAGCTAT TCCTCCTACA      120
GCTTTCCTGA ATTATTCAG AATACAAAAT TCTGTATCTC CAAGAACTA TTACAGATTT      180
AGATTTAAAA ATATGCACTA TTTTCTACCT TGTATGTTTT GCTTACTATT TTTTTTTGTC      240
AGAGGATATG TCTTAAAAAT TGAAATGCAT CAAAAAT                277
```

(2) INFORMATION FOR SEQ ID NO:370:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 348 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

```
GAATTCGGCC TTCATGGCCT ACCAAGTCAA AAAATAGAAC AGTTCCGGCA CCCCAGAAGC      60
CCTTTGCCAC GTGGTCACAA CCTCCCTGT TTCCACCAAC AGTAACATC TAGTTTTTAC      120
AGTAATTTCT TCCTTGCTTT TCTTGTAAT TTTACTGCCC TGTGTTTCTT AATATGATT      180
AGTTTTCGCT GGTTCGCT TCATATAAAT GAAATCATAC TGAATATATT ATTCATATT      240
TTGCCAATA TTTGTTTGT AAGATTCATC CATCTGTAG CTCCAATGTA TTTATTTTCA      300
TTTTGTGATA ATTATATGAT TATGCCACAG TTTGTCAGT CACTCGAG                348
```

(2) INFORMATION FOR SEQ ID NO:371:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

GAATTCGGCC	TTCATGGCCT	AGAATTATTA	GGAAACAAAT	GGTTTGTCTG	TCTTTTGGTC	60
ATTAGCTTGG	CCCCATGTTT	AAGCATTTCG	TAACAACTGT	GAAGAGCCTG	CTACAAATAA	120
AGTGGTAGGT	GCTCTGAAGA	AAAATAAAGC	TGTTAAAGGG	AATAGAAAAGT	GATGAAGGCA	180
GGGGCTGTTA	GACAGGCTGG	TCAGTGTCTG	AGGAAGTAGC	CCTGCACTGA	GACCTGAAAA	240
GTAAAGAAGC	AAGCCATGGG	GAGTTGGGGA	GGAGCATTCC	AGACAGAGGC	TTGATGTGTT	300
GAACCATCTT	TTCCAAGCTC	TTCCTCTGTT	ACCTTCTCTT	TAGTCACTAT	GTCCCTTTTC	360
TATCCCAGAC	CATAATTCCA	CCATTATCT	TAAGGCTGAG			400

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 268 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

GAACGATTGA	ATTCTAGACC	TGCCTCGAGA	TCAGCACTAA	CCCCCCCCAAC	TCCCAGCCTT	60
TAGTTTGCTG	TAGGCTGTCA	AACCAGATAA	CCAACTTGT	TAAATTGAGA	ATCAATAGGC	120
TGTACATAGG	GACTACAACA	GAATGACGCT	CATTATTGAC	AGAATCAAGT	TCAAACCTCT	180
TGTCCTGGCG	TCTGTTGGCC	TCTGGCAGCT	GGCTCATCTG	GCATTAGCTG	GTTGCACGAG	240
TTGCTGCAAC	CCTCCACCC	CGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 463 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

GTGAGGTTTT	AACTGAGCTC	GAAGAATTGG	AATCAAAAGA	GATAGGTTTG	TCTCAGTCCA	60
GACAGTGGAT	AGCATAAGGA	AAGTACAAC	GCAGAAAAGA	GGGGGACAGC	GAAGAGACTG	120
GATTGATGCG	TTATCTAGGC	GGTACCTGTC	TCCATTCTTT	TCTAGCCAGC	CTTTGAGCAT	180
TTCATCAAGA	ATAGAGGAAT	TCAAAGTACT	GCAGTCTGCT	TGAACCACTG	CTGTGTAGTG	240
GCTCTAAAAA	AAATACTTGA	ATTTGAACTT	GAAAGAACAC	TCAAATAAGG	TTGGGGGCTT	300
CTCTTTGTTT	AATACTTTAA	GCGTCTTATT	TCTAACATAA	ATATACTGAT	TGCACAGAAT	360
TTGATTGTTC	ATAGCAGCAG	TTGCCTGTAC	TTTAGAATTC	TCAGATATTA	GAGCTGAAAG	420
ATCATCTGAG	TTACTTTATA	AATGGGGAAA	TCTCGATCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 451 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

GAACGGCAGC	CATTGAAGCA	TATTGGAAAA	GGAAGTGGGG	AATTTATTAA	AGCACTCATG	60
AAGGAAATTC	CAGCGCTGCT	TCATCTTCCA	GTGCTGATAA	TTATGGCATT	AGCCATCCTG	120
AGTTTCTGCT	ATGGTGCTGG	AAAATCAGTT	CATGTGCTGA	GACATATAGG	CGGTCCTTGA	180
GAGAGAACCT	CCCCAGGCAC	TTCGGCCACG	GGATAGAAGA	CGGCAGGAGG	AAATTGATTA	240
TAGACCTGAT	GGTGGAGCAG	GTGATGCCGA	TTTCCATTAT	AGGGGCCAAA	TGGGCCCCAC	300
TGAGCAAGGC	CCTTATGCCA	AAACGTATGA	GGGTAGAAGA	GAGATTTTGA	GAGAGAGAGA	360
TGTTGACTTG	AGATTTCAGA	CTGGCAACAA	GAGCCCTGAA	GTGCTCCGGG	CATTTGATGT	420
ACCAGACGCA	GAGGCACGAG	AGCCCCCTGA	G			451

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 513 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

GAATTCGGCT	TCATGGCCTA	CTCAGATCTT	AAAATTCAGG	CTGTCAAAGA	GATTTGCTAT	60
GAGGTTGCTC	TCAATGACTT	CAGGCACAGT	CGGCAGGAGA	TTGAAGCCCT	GGCCATTGTC	120
AANATGAAGG	AGCTTTGTGC	CATGTNTGGC	AAGAAAGACC	CCAATGAGCG	GGACTCCTGG	180
AGGGCAGTGG	CCAGGGACGT	CTGGGATACC	GTCCGTGTTG	GGGATGAGAA	GATCGAAGAC	240
GTCAATGGCCA	CTGGGAAAGG	CAGCACTGAT	GATAGTGACC	TCAAGGTTCA	TATAGACAAG	300
CTGGAAGATA	TTTTGCAAGA	AGTCAAAAAG	CAAAATAACA	TGAAAGACGA	GGAGATAAAA	360
GTCTTAAGAA	ATAAAATGCT	CAAAATGGAA	AAAGTCTTGC	CACTGATCGG	ATCTCAGGAA	420
CAGAAAAGCC	CAGGAAGCCA	CAAAGCAAAG	GAGCCTGTTG	GTGCTGGTGT	TAGTAGCACC	480
TCTGAGAATA	ATGTAAGTAA	AGGAGACCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

CAGAATGGGA	TCGAAGCCTG	CCTCCTTAGG	NTCTTTGCCN	TCATCCTCTC	TGGCAAATGC	60
AGTTACAGCC	CGGAGCCCGA	CCAGCGGAGG	ACGCTGCCCC	CAGGCTGGGT	GTCCCTGGGC	120
CGTGCGGACC	CTGAGGAAGA	GCTGAGTCTC	ACCTTTGCCC	TGAGACAGCA	GAATGTGGAA	180
AGACTCTCGG	AGCTGGTGCA	GGCTGTGTCT	GATCCCAGCT	CTCCTCAATA	CGGAAAATAC	240
CTGACCCTAG	AGAATGTGGC	TGATCTGGTG	AGGCCATCCC	CACTGACCCT	CCACAGCCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:377:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

```
GAATTCGGCC TTCATGGCCT ACTTCATTGT AAGGTA CTTC TTTGCGGCGC TGACAGTGCT      60
CACGCTCCTG GGCCTCCTCC ATGGACTCGT GCTGCTGCCT GTGCTGCTGT CCATCCTGGG      120
CCCGCCGCCA GAGGTGATAC AGATGTACAA GGAAAGCCCA GAGATCCTGA GTCCACCAGC      180
TCCACAGGGA GCGGGGCTTA GGTGGGGGGC ATCCTCCTCC CTGCCCCAGA GCTTTGCCAG      240
AGTGACTACC TCCATGACCG TGGCCATCCA CCCACCCCCC CTGCCTGGTG CCTACATCCA      300
TCCAGCCCCT GATGAGCCCC CCAGGTCCCT CGAG                                     334
```

(2) INFORMATION FOR SEQ ID NO:378:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 305 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

```
GGATTTTAAG GATCACATTC CAAGGGAAC TGATATGAAG GTTGCAATGA ATGTGTATGA      60
GTTATCATCA GCTGCCGGAT TACCTTGTGA GATTGATCCT GCATTGGTCG TAGCTCTTTC      120
TTCACAAAAA TCGGAAAACA TTAGTCCAGA AGAAGAGTAT AAAATTGCCT GCCTTCTCAT      180
GGTGT TTGTG GCAGTTTCTT TGCCAACACT GGCCAGTAAT GTGATGTCTC AGTACAGCCC      240
TGCTATAGAA GGCATTGCA ACAACATACA TTGCTTGGCC AAAGCCATCA ACCAGATTGC      300
TCGAG                                     305
```

(2) INFORMATION FOR SEQ ID NO:379:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

```
GAATTCGGCC TTCATGGCCT ACCCAAACAT TATCCCTCTA CACTGTCCCC ACTATGCTAT      60
ACCCCTGCAC TATACCCCTA TGCTGTCTCC CTTACGCTAT CCCCCTATGC TATGTCCCCT      120
ACACTATCCC CCTTTGTGT CCCTCCATGC TACTCCCTAC GCTATCCAC TACTCTATCC      180
CCCTGACGCT GTCCCCCTAC GCTATCCGC TACACTGTTC CCCCTACACT ATCTCCATAC      240
ACTGTCCCCC TACACTCTCC CCCTACTCAA TTCCCCCTAC ACTCTCCGCG TACACTATCC      300
CCGCTACACT ATCCCCGAC GCTCTCGAG                                     329
```

(2) INFORMATION FOR SEQ ID NO:380:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

```

GTTGGAATGC TCTTTACTTC CTTTGTGGAG CCTCCCTGCA CAAGCAGCAC TTTCTTTTGC      60
CATAGCAACA TGTGCATCAA TAATTCTTTA GTCTGTAATG GTGTCCAAAA TTGTGCATAC      120
CCTTGGGATG AAAATCATTG TAAAGAAAAG AAAAAAGCAG GAGTATTTGA ACAAATCACT      180
AAGACTCATG GAACAATTAT TGGCATTACT TCAGGGATTG TCTTGGTCCT TCTCATTATT      240
TCTATTTTAG TACAAGTGAA ACAGCATCTC GAG                                     273
  
```

(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

```

GAATTCGGCC TTCATGGCCT ACATAACTCT CCACAGGCTC CCCTGGGAGG GGTGCCCCCA      60
CCTCACCCGC CACCTCACTT CTCAGCCCTT CTTCCTATCC AAGGGCTCCC TGGGCTGCCC      120
CCACCCTAGT CATGATCTCG CTCCTCTACT CTCTCGTAGT ACTTTATTTT TACCTTGCTC      180
CTGGCTCACA TTACATGCTT ATCTTGATT TATAGATGGT TCTACATATG TCTCCTTTTG      240
CATCCTTTTC TCAAAGCTCC TGTGAGGCCA GGGATGGTTT TATGCCTTTT CTCATCCCTT      300
TATGTTCTAG TATAATGCTT TACACATGTT TACTCGAG                                     338
  
```

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

```

GAATTCGGCC TTCATGGCCT ACTTTCTCTC CTTTTTCCT GTAACTGTGC TGGTTTTGTT      60
TTGGTCTTCC TCTCATACCC GTTTCTGCAT TTCATCTTTT CTTTCTATTG GGACTTCATT      120
TCATTTTTTT TTAACCTTAT CTTTGTGTTT TCTTGTTTAT CCCATCCTTT TTGATAAAAT      180
CCATCGCATG TGTCTTCTTT TTTTCTTTAT TTTCTTTCCT TTCCTTTTTT CTTTTTCTTT      240
CTCCCAAAC TTTTCCTTTT CACAGCATTG GAACACGGGA GGTAGTCACC CAGAAGAACT      300
TGAGCGGCCT GGTGCCCATC CGAGACCACT CGAG                                     334
  
```

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 232 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```
GCAGAAAATA TGGTATCGGT TTCATTTAAT AAAAATGAAA AAATAATTTT CAGTTATCAG      60
TAATTTCTCA GTTACACAAC CTCTGCCTTC ATTTCCGCTT AGCCATGAAC TTTTACTGCG      120
ACAAAGGAAT TTAAATAGC CAAATTCTAC AATTCTGGCT GGGTGTGGGG GCTCATGCCT      180
GGGATCTCAG TAGTATGGGA CCCCAGAGCA GGTCTAGAAT TCAATCCTCG AG              232
```

(2) INFORMATION FOR SEQ ID NO:384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

```
GCCTCTGCTT TTAATTCATT GGCAACTGTT ACGATGGAAG ACCTGATTCG ACCTTGGTTC      60
CCTGAGTTCT CTGAAGCCCG GGCCATCATG CTTTCCAGAG GCCTTGCCTT TGGCTATGGG      120
CTGCTTTGTC TAGGAATGGC CTATATTTC TCCCAGATGG GACCTGTGCT GCAGGCAGCA      180
ATCAGCATCT TTGGCATGGT TGGGGGACCG CTGCTGGGAC TCTTCTGCCT TGGAAATGTT      240
TTTCCATGTG CTAACCTCC TGGTGCTGTT GTGGGCCTGT TGGCTGGGCT CGTCATGGCC      300
TTCTGGATTG GCATCGGGAG CATCGTGACC AGCATGGGCT TCAGCATGCC ACCCTCTCCC      360
TCTAATGGGT CCAGCTTCTC CTGCCCACC AATCTAACCG TTGCCACTGT GACCACACTT      420
CTCGAG                                         426
```

(2) INFORMATION FOR SEQ ID NO:385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

```
GAATTCGGCC TTCATGGCCT AGGCCCTTAA ACTGGATTCA AAAAATGCTC TAAACATAGG      60
AATGGTTGAA GAGGTCTTGC AGTCTTCAGA TGAAACTAAA TCTCTAGAAG AGGCACAAGA      120
ATGGCTAAAG CAATTCATCC AAGGGCCACC GGAAGTAATT AGAGCTTTGA AAAAATCTGT      180
TTGTTCAGGC AGAGAGCTAT ATTTGGAGGA AGCATTACAG AACGAAAGAG ATCTTTTAGG      240
AACAGTTTGG GGTGGGCTG CAAATTTAGA GGCTACCTCG AG              282
```

(2) INFORMATION FOR SEQ ID NO:386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GATTGAATTC TAGACCTGCC TCGAAGGCCG AGAGGGAAAG TTGAAAGGTC CCAAATTCAA	60
GATGCCTGAG ATGAACATCA AAGCCCCCAA GATCTCCATG CCTGACATTG ATCTTAACCT	120
GAAAGGACCC AAAGTGAAGG GTGATATGGA TGTGTCTCTG CAAAAGTGG AAGGTGACAT	180
GCAAGTTCTT GACTTGGATA TTAAAGGCC CAAAGTGGAT ATTAATGCCC CAGATGTGGA	240
TGGA CTGAG	250

(2) INFORMATION FOR SEQ ID NO:387:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

GAATTCTAGA CCCACCTCCA CTTTAACTC GAAGTAACAC TGCAAATCGT TTAATGAAAA	60
CACTCTCAAA ACTGAATTTA TGTGTTGATA AAACAGAGAA AGGAGAAAGT AGTAGTCCTT	120
CTCCATCAGC TGAAAAAGGA AAGATTCTAA ATGTTTCAGT GATTGAAGAA AGTGGCAATA	180
AAAACGATCA AAAGTCTCAA AAAATTATGA AGAAGAAAGA GTCATCTTCT ATGTTGGCTA	240
CAGTTAAAGA AGAAGTCTCT GGTAGTTCAG CAGCTGTTAC GGAGAATGCT GATAGTGATA	300
GAATTCTCTGA TGAAGCAAAT AGTAATTTTA ACCAAGGGCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:388:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 165 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

GGAGTAATCA GAGGTGTTCT TGTGTTGTGA TAAGGGTGGC AGGAGTGGAC ATTCTTCACA	60
TACACCCATT ATTGTTTTGA AGTGTTTAAT TACCTTTTGA GCTACATTTT TGCAGCTGAG	120
TTAGAATGA AAACCACAAG AGTTTTATTG TTGGCTGTAC TCGAG	165

(2) INFORMATION FOR SEQ ID NO:389:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 252 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

GAATTCGGCC TTCATGGCCT AGAACAGAGC TTACTTATTC TTTCTGAAAC CAAGGCTTCT	60
CTAGTGAGCA CCATGAGCCT TTGGAAACAA CAGATGTATA CAATAGCAAA GTTTCATTTC	120
TTTACCTTGA AACGTGAAAG TAAATCAGTG AGATCAGTGT TGCTTCTGCT TTTAATTTT	180
TTACAGTTC AGATTTTTAT GTTTTGGTT CATCACTCTT TTAAAAATGC TGTGGTTCCC	240
ATCAAAC TCG AG	252

(2) INFORMATION FOR SEQ ID NO:390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```

GAATTCGGCC TTCATGGCCT AGGATGTTCA CTGCGATGCC TCTGGATTTT AAAATTATTG      60
TTCACATGAC TCCTTTTCTG TGCCTTGGGA AGCAGCTACA GAGCAGTAGA ATCCACTGAA      120
TTGGTACACT GAAGCAGGCA TGCCATTTAA ATGAAGGCAG TTAACCTTGA CTGTTGTATC      180
ACCAGAGTTA AAGAATTCTG GTGCCCCCTCT TTAAGTCTTC AGGAAGTGTT TAGAGGCTTA      240
TTCACATTAG TTAAACAGAG CCCCCCCCAC CTCCCCCAAG GCAACAGAAA ACATAACCAT      300
TAGCTCTCTT CCTGTTTTC TTCTTCATTT CATGCTTGCT TCGGCTGCTA AACTGAATTT      360
TTGTTACTTA GAATATTATA AAGTGTGGAT GCTTCTATA ATGCTATTGG TCTAAGTGTG      420
ATTAAATTTT ATTAAGGTGT ATAAGCCTCT AATTATTACA TAACTGGCAC TGGCTCGAG      479

```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```

GAATTCGGCC TTCATGGCCT AGCCTATTAC ACAGTAAGTT AATAATTGTG TCCTTGCAAA      60
TAAGCATTGT GTTCTGAAAT GGAATCAGCA TATTCCCTA TAAAGACACT TCCACTCATT      120
CATTAAATGA GCAGCCCCAG TTGATAAAGA ATCAGTATAT CATGTTCTGA TATTTAATCA      180
GCAAACATCAT TTATTCAGTA GAAATTTGAA TTCCTGTGAT GTGCCAGGCT TGTGAGGAGG      240
GAGACTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```

GAATTCGGCC TTCATGGCCT AGTCGACTCC TGTGAGGTAT GGTGCTGGGT GCAGATGCAG      60
TGTGGCTCTG GATAGCACCT TATGGACAGT TGTGTCCCCA AGGAAGGATG AGAATAGCTA      120
CTGAAGTCCT AAAGAGCAAG CCTAACTCAA GCCATTGGCA CACAGGCATT AGACAGAAAG      180
CTGGAAGTTG AAATGGTGGA GTCCAACTTG CCTGGACCAG CTTAATGGTT CTGCTCCTGG      240
TAACGTTTTT ATCCATGGAT GACTTGCTTG GGTATGGAGA GTCGGCTTGA CTACACTGTG      300
TGGAGCAAGT TTAAAGAAG CAAAGGAACT CCTCGAG                                     337

```

(2) INFORMATION FOR SEQ ID NO:393:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 216 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

```
GCGATTGAAC TCCTGACCTC AAGTGATCTG CCCACTTGTG CCTCCCAGAA CTGGGATAAA      60
AAAAAAAAAA ATAGATCCTT GGTATTATTC CATTACATAC GGATTGTAAA ATTCAGTTAA      120
ACATTCATCT CTTGGTGGGC ATTTATGTAT TTCTTTTGTG TGTGTGTTG CAGCATTGCT      180
CTGTAAACC TTTTATAAG TACATCTCGA CTCGAG      216
```

(2) INFORMATION FOR SEQ ID NO:394:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 248 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

```
GAATTCGGCC TTCATGGCCT ACCACATTG TAACGGAGCC ATTGAAGCAT ATTGGAAAAG      60
GAATCGGGGA ATTTATTAAA GCACTCATGA AGGAAATTC AGCGCTGCTT CATCTTCCAG      120
TGCTGATAAT TATGGCATTG GCCATCCTGA GTTCTGCTA TGGTGCTGGA AAATCAGTTC      180
ATGTGCTGAG ACATATAGGC GGTCTGAGA GCGAACCTC CCAGGCACTT CGGCCTGGGA      240
TACTCGAG      248
```

(2) INFORMATION FOR SEQ ID NO:395:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 238 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

```
GAATTCGGCC TTCATGGCCT AGCCTTCCTC TACCATTTTT AATTTTTTTA GACTTCATTT      60
TGTGATTTAT TGCTGCTCTG GGGGCTTCAC ATCCAATCCT TTTATGGTTT CATCTTTCCT      120
TTCCTTACAT TTGTTGCATA TAACATGGC GTGTTTAGCT ACTGCAGTGA AAAATCAATC      180
AAGCCTATTC CATATTCACA GGCTTGCAAT GGCACCAACG GCTCCTGGAT CTCTCGAG      238
```

(2) INFORMATION FOR SEQ ID NO:396:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 188 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

GAATTCGGCC TTCATGGCCT AAGTTGATCC GGATACACAC CTGCTAAAAC TGCTTAAAC	60
ATTAGAAGGA CATGCTTATG GCGTTTCTTA TATTGCATGG AGTCCAGATG ACAACTATCT	120
TGTTGCTTGT GGCCAGATG ACTGCTCTGA GCTTTGGCTT TGAATGTAC AAACAGGAGT	180
CTCTCGAG	188

(2) INFORMATION FOR SEQ ID NO:397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

GAATTCGGCC TTCATGGCCT ACAGGCATGT TGAGATTGG AAAAGTGGAT GTAAGTAAA	60
TTCAGATAGC TTTAGTGATT GTCTTTGTGT TGTCTGCATT TGGAGGAGCA ACAATGTGGG	120
ACTATACGAT TCCTATTCTA GAAATAAAAT TGAAGATCCT TCCAGTTCTT GGATTTCTAG	180
GTGGAGTAAT ATTTTCCTGT TCAAATTATT TCCATGTTAT CCTCCATGGT GGTGTTGGCA	240
AGAATGGATC CACTATAGCA GGCACCACTG TCTTGTCACC TGGACTCCAC ATAGGACTAA	300
TTATTATACT GGCAATAATG ATCTATAAAA AGTCAGCAAC TGATGTGTTT GAAAAGCATC	360
CTTGCTCTTA TATCCTAATG TTTGGATGTG TCTTTGCTAA AGTCTCACA AAATAGTGG	420
TAGCTCACAT GACCAAAAGT GAACTATATC TTCAAGACAC TGTCTTTTG GGGCCAGGGC	480
TCGAG	485

(2) INFORMATION FOR SEQ ID NO:398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

GAATTCGGCC TTCATGCCTA GTGGATCCGG AAACCTCTGTG GCTCTAGACT TTCAACTATT	60
TTATTTTTTC TTTTGTATTT TTTGTTGTT GCTTGCTTTT TTACAATGGG AACTAGAATG	120
TAAGATGCCA AACTCAGCCT GTGGGGAACA TGGATTTTCA CAACAGCAAC CACAGAGCGT	180
GGTTTCATT TCTATTCCT GTTCATGTGG GAGGCAGAGA AGGAAATCAG GTGCTCAGTT	240
CCAGGGACAT CACAGGACAG GACTCGAG	268

(2) INFORMATION FOR SEQ ID NO:399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

GAATTCGGCC TTCATGGCCT ACACCTCTTC TGCCAACCAG CTGCTTGGGA TGA CTGCGAT	60
CCCGTGTGCT TGTCTGGGTA TCTTCCTGGG AGGTCTTTTG GTGAAGAAGC TCAGCCTGTC	120
TGCCCTGGGG GCCATTGCGA TGGCCATGCT CGTCAACCTG GTGTCCACTG CTTGCTACGT	180
CTCCTTCCTC TTCCTGGGCT GCGACACTGG CCTGTGGCT GGGGTTACTG TTCCCTATGG	240
AAACAGCACA GCACCTGGCT CAGCCCTGGA CCCCTACTCG CCCAAG	286

(2) INFORMATION FOR SEQ ID NO:400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGATGATCAT TCTTTCTTG CTTCTAGGCT	60
CTGTGTCCTC CTGGTTTCCT CCAACCTCTC TGGTCCTGTT TCATTGCTG TGGGTTCCCT	120
TTGCCTTTGC CACCCCTCAA ATGGGGCTTC TCACTCACAC TAGTGAGTTT TCAGTGCTTG	180
CAGACCCAAC ACCCTCTTTT TATAACAAAT ATTTTAAAT ACGTCCTTTT CCACAAC TCG	240
AG	242

(2) INFORMATION FOR SEQ ID NO:401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

GAATTCGGCC TTCATGGCCT AGTCCCATCA GAGGGAGCTG ATGAAGAATG GTCCCTGTAA	60
GTAAGTCACT AGGTTCAACA ACTGCCTGGC CGAGCACTCA GCCCCTGGAG CTCAGGCCAA	120
CACCAGAGCC CCGGTTT TAG GGGCCAGGAG AGCAGGTGAC CAATTATTTG GGGAGTCTTG	180
GGTAGAATTT CCGCCACACA TTCTCCCGAG GGCTGCAGGG GTCTTCCGAG GCAGGGCGGT	240
GGAGCAGGAT TCAGGATGTG GTGGGAATAG ACTGAGGGGC AGTGGGTGGT GCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

GAATTCGGCC TTCATGGCCT AAAAACTAG AATAATGGAA GAGTAAATA ACACAATTCT	60
TAATGTATTA CAAGAAATAA AAGGTTTAAA AGTAGATTTT TTAATTGAAA AGAATTAAT	120
CAGATAAAAA TATTTGAGAG GTAATGCAAA CATTTAAGTT TGTCAAAGAA GCTTCAACAT	180
CTGGATAATA GGAAAGAAAA AAACCAAAGC AAAAGAAAAA TAAGCCACAA ACTAAAAAAT	240
GT TAGTTCT TGAAATTAA AAAAGTAAAT ATTGAAAGAG CATGCTGTGT ACCTGAGATT	300

ATTTACCCAA AACTCGAG

318

(2) INFORMATION FOR SEQ ID NO:403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGC CTCGAGTCTG GGCACCCTGA      60
GCAGCAGCCT GAGCCGGGCC AAGTCTGAGC CCTTCCGCAT TTCTCCGGTC AACCGCATGT      120
ATGCCATCTG CCGCAGCTAC CCAGGGCTGC TGATCGTGCC CCAGAGTGTC CAGGACAACG      180
CCCTGCAGCG CGTGTCCTGC TGCTATCGCC AGAACCGCTT CCCCGTGGTC TGCTGGCGCA      240
GCGGGCGGTC CAAGGCGGTG CTGCTGCGCT CTGGAGGCCT GCATGGCAA GGTGTCGTCTG      300
GCCTCTTCAA GGCCAGAAC GCACCTTCTC CAGGCCAGTC CCAGGCGGAC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

```

GAATTCGGCC TTCATGGCCT AGTCATGGAA CAAGTCCTTG CTAAACTAGA AAACAGGACT      60
AGTATTACTG AAACAGATGA ACAAATGCAA GCATATGATC ACCTTTCATA TGAAACACCT      120
TATGAAACCC CACAAGATGA GGGTTATGAT GGTCCAGCCT GGGTGACAGA GCGAGACTCT      180
GTCTTATAAA GAAAAAAAAA AAAAGAAGTG GCAGCTCTGT CTGCTTCTCA CAGAGTTGCT      240
AGGGACAAC TGTGAGGCAG GCACCTGCCC TTGGGCTCCC CGGGTGGGCT GCTATTTGGC      300
TGTGGGCTCT GCCTGCCCCG CTGTCCAGTC CCCGGGGTGG CTCGAG          346

```

(2) INFORMATION FOR SEQ ID NO:405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

```

GCGATTGAAT TCTAGACCTG CCTCGAGAAC AGGGAACCTT CAAACAAAAG ATATATCATA      60
GGAAGTCAGG TGAGAAGCTG TCAACTGGGC AGGCAGTGAT GAGAATCGTA GTTGCTTTAC      120
TGTAATTTTT TGTTTTGTTT AAAAAACCTA AAGCATCACG CATTTTGAAA GCAGAGTTTG      180
CAGAGAGCCC CCAACAGAGC CAGAACTTGC CAAGAGCGAC TGATATTTCT AGAATCCCAC      240
GAGGCAG          247

```

(2) INFORMATION FOR SEQ ID NO:406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

```

GAATTCGGCC TTCATGGCCT ACAACATCAA AACTCCCAAG CAAATGGATG AATTCATTGA      60
GATCCAAAGT TCAACAGGAA CCTGGTACCA GCGCTGGCTG GTCAGATTCA AGACCATTTT      120
CAAGCAGGTC TGGGATAATG CCCTGTACTG TGTGATGGGG CCCTACAGAA TGAATACACT      180
GATTCTGGCC GTGGTTTGGT TTGCCATGGC ATTCAGTTAC TATGGACTGA CAGTTTGGTT      240
TCCTGATATG ATCCGCTATT TTCAAGATGA AGAATACAAG TCTAAAATGA AGGTGTTTTT      300
TGGTGAGCAT GTGTACGGCG CCACAATCAA CTTACGATG GAAAATCAGA TCCACCAACA      360
TGGGCCTCGA CCTGACTTGT CCCCCTTGCC CATCAGCCAT TTGCCATCAC CCCAAACAAC      420
TCAGCTTCGG GGAAGTCTCG AG                                         442

```

(2) INFORMATION FOR SEQ ID NO:407:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

```

CCGAGTGACC TTCTTGATGC TGGCTGTTTC TCTACCGTT CCCCTGCTTG GAGCCATGAT      60
GCTGCTGGAA TCTCCTATAG ATCCACAGCC TCTCAGCTTC AAAGAACCCC CGCTCTTGCT      120
TGGTGTTCTG CATCCAAATG CGAAGCTCCT CGAG                               154

```

(2) INFORMATION FOR SEQ ID NO:408:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

```

GAATTCGGCC TTCATGGCCT AGTTTACTTC TGCTTGATCT TTATTCTTCC TTGCTACTAA      60
TTTTGGATTT AGTTTGTCT TTTCTAGACA TTCATTGTTA GATTGTTTAT TTACAATTTT      120
TCTAGTTTTT TTGATGTAGA CATTTA                                         146

```

(2) INFORMATION FOR SEQ ID NO:409:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

```
GAATTCGGCC TTCATGGCCT AGATGTTGCC AGTTTTCATG GAGGAAGTAG ACATGAAAGC    60
TTGTTTGTA TGTGTTTGAC AGAGTAGAAA GACATTGAAG AAGGTGATGG TATACATCAC    120
TTGAATATTT TTATTGAAAA GGGAGGGAGG AAATGGAGCG TTAGTTGTAG GACCAGATGA    180
TGTAAGAGA GTTTTTTAAA GTGTACAAA CAATGGCATG TTGTGATACT AATGAGAAGG    240
AGCCAATAGA GAACAAAAA TTGATGATGC AGGAGACGAC TCGAG                    285
```

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

```
CTCGAGGGAT CTGGCTTCT CTGTCTTCTC ATTTACTACA TNACGCTGGT GAATTAATAG    60
ATNTCTCAAC AAAAGGACAT TTAAATCAAC ATATGACACC TGTTTAAATT CTTAAGAAGC    120
CATTAAATAC ACATTCTTAA GAAAATGAGC TATGACACAA CTCTTCTCAC TGTATAACTC    180
CTATCTGTGA TTCTCAATCA GGTGACTTTT CAGCTNCAAG ACGGATCTTT TCTATTCATC    240
TCCTCTGGTT CGGACCAATT AAATGTNTTC TTTTGCAATC ANAACATCTC ANNTGCCAAA    300
TCTTCAAAAG CAAAGGAGTT NGTTAGCAAC ATATTAGGCC ATGAAGGCCG AATTC        355
```

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

```
GAATTCTAGA CCTGCCTCTG TATGTTGCTT TAGCCAGGAT TCAGAGCTAA AGTGTAAAGT    60
TGTGCTTCTG CTTTCTGGAT GTATCTCTCA AAATTGCTCT GTCTGTTTAT TCAGCTCCTG    120
GATCTACCTT CTCTTTTCTT TGAATTGGAC ACCATTCATG TCATTGCTCA CTCAGAACTT    180
CAGCTGTTCT CATGATCACA TGCTTTCTTC CCTGTTTATG TCCAAT                226
```

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

```

GAATTCGGCC TTCATGGCCT AGTCTGCTGC TTAGCTTGTA TTTTCAGTTT AATATATTCG      60
TGATCATTAA CAAAACAGCG AAGTGAATAA TGGGCATAAA TTTTCCTAAG AAGAATCATT      120
TTCCATACTT ATTTTTCAT ATTATCAAAA AGTATGTAAT TTTGGGGGGT TTTTGGTTT      180
TTTTTTTTTT TGAAACAGAA TCCTGCTCTG TTCTCGAG      218

```

(2) INFORMATION FOR SEQ ID NO:413:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

```

GAATTCGGCC TTCATGGCCT ACTTTGAACA ATTCGGCATG AATTGAAACC AGGTTTTCCT      60
GTGGAAAGTT ATAGCTTGAT TGGGAGATAG AAGTGAATT GAGTCTTTT TTGCAACTCT      120
TAGTGTTTAT TTTTATATCT CAGTAAGACG AGGATACCTT CAGTTTGAAT CTGCATAATG      180
TTCAC TGCCA AACTCCTTCT CATTAAATGC TTATGGCCTT CACATTTCTG TATAATAAAG      240
ATCAATTATC AGCACTCGAG      260

```

(2) INFORMATION FOR SEQ ID NO:414:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

```

GAATTCGGCC TTCATGGCCT AAGCATATGA ATTTTGGAGA GACAGACATA CAGACCATAA      60
CAGTCTTATT TTCTATAACT ATAGTAGAAT ATCGAAATGA GAACATTGAC ATTGGTAAAA      120
GGTGTATGTA TAGTTTATAT GTTATCTTAT CAAAAGGGTA GATTTACAGA ACCAACACAA      180
GTAAGCTATA GAACTAGCCC ATTACCACAA AGATCTCCCA CAAGCTACAG CTTTACAGTC      240
ATACCCACCC GGCTCGAG      258

```

(2) INFORMATION FOR SEQ ID NO:415:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

```

GAGGACCTTT ATAATCTACT ACTAATTACT GTGAAAGTAA ACATTGTTTA ATATACCACT      60
TCTTAAAGAA ATATTTTGTC TAGTCATTAA TATTCTAGTT CATCTCAAAG CTTCCATTG      120
ACAATTTAAA ATTACTTAAA TTTTAATATT AAAGGAAACA GTTTTCCCTGA TTCTCATGAA      180
AGTTCCTATT TGCACTGAAG ATGACTAAAC CTTTGTAGTCA TAGTTTTAGA AGAATTGGCT      240
TTTTTATAGC CATTTTATTT ACATATGGGT ACGGACTCGA G      281

```

(2) INFORMATION FOR SEQ ID NO:416:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 118 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

GAATTCGGCC TTCATGGCCT ACTCAGAAAA GAAAATGAAA ATACCTCTAC ATGTGGTCTT 60
 CCTGCTAATC TCTCTGACCT TCCTATTCAC CACCCTCCCC ACTGCCCACT TACTCGAG 118

(2) INFORMATION FOR SEQ ID NO:417:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 273 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

GCGAGGATGG CATGGACGCT TATCGAGCAG CTTCAGGGTG GCAGCTACAA GAAGATTGGC 60
 TACTATGACA GCACCAAGGA TGATCTTTCC TGGTCCAAAA CAGATAAATG GATTGGAGGG 120
 TCCCCCCCAG CTGACCAGAC CCTGGTCATC AAGACATTCC GCTTCCTGTC ACAGAAATC 180
 TTTATCTCCG TCTCAGTTCT CTCCAGCCTG GGCATTGTCC TAGCTGTTGT CTGTCTGTCC 240
 TTTAACATCT ACAACTCACA TGTCCTCTC GAG 273

(2) INFORMATION FOR SEQ ID NO:418:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 145 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

GAATTCGGCC TTCATGGCCT AAGCAGTTGC TAATGCCAGC AGTACATAAA TTGAGGATGG 60
 AGCAAAAGGA TCGACACCAC CAATGGCTGC ATTGTGATAG GTGTGGACAG AGCCTGCCAG 120
 AATTAAACAC ACGCCAGGAC TCGAG 145

(2) INFORMATION FOR SEQ ID NO:419:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

```

GGATTCGGCC TTCATGGCCT AGTGTTTATA ATTAATCCTT TAATATTATG GTTATTAACC    60
TCTTAAACAT GAATGAATTC TTGATTGTTT TAACACAGTA CCTAAGACTA ATGCTTTCTG    120
TGGACACCAC TGAGCTCTGC CTCAACTCCA CCCTCTGCGA CCGGAGGACT ATGCCCCTAG    180
TAACTGCTGT CGGTGTGGAC GCTGTGCTGG TTCTGTTTTC TAAAGGAGCA GAAGGACAGG    240
TCTCTGAGAC AGGATCGTTG TCCCTACAGG AGGAACAGTG GCCACTCGAG    290

```

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCCT CCCAAAGTGC TGTGATTACA GGAGTGAGCT    60
GCCACGCCCA GCCTACAAGT TTTTCTTTAA CTACTGCTTT AGTCAACCAT ATCCTCTAGC    120
TTCTGATATT TTCATTGTTT GTTGTCAATT TCTAGATATT CAACAATTTC AAATTAGATT    180
TTCTCTCGA CTAAAGTGGA AGAATTTTTT CCCGTTTATT TTCTACATGC TAAAGATTTT    240
TATTTTCATT TTGTTATTAA TTTCTAGTGT TACCGTATTG TCATTAGAAA ATATGGGCTG    300
GCTCGAG    307

```

(2) INFORMATION FOR SEQ ID NO:421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

```

GAATTCTGAA AATATTAAGA TTTATCCTAG CACTTACGTT CAACATACCA TAATTTTAT    60
ACTTCTCCAT CTAAATAAAA CCAAGTTTGT TCCTACACTA GTCCAGCCTG CATTCTCAAG    120
AACTCCAGTG ATTATACATC AACATCTAGA GATCAGGTAT CCCAATCCTT TCTTCCTATA    180
TCTAAGCTAA CTCCTTCTTA GCCAAATGGT ACCCTTTGAT TTGTGTAA TCCTTTCCTT    240
CCCTCCACTC TTAACCCCTC TCATTCCATC TTCTCCCTCC CTTTCCACC CCACTCTCGA    300
G    301

```

(2) INFORMATION FOR SEQ ID NO:422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

```

GAATTCGGCC TTCATGGCCT AGGTAAAGT TGTCTGGTAA TAAGGTGGAG TGGATTGGG      60
GCAGGTTTTA TGTGTGTG CTTCTCTTAG AAGTCAAAGA GTTGGTGAGG TAACTGCAAT      120
CCTGTCTATA TCAGTGTAGT GATAATGCAC TAGTGTAATG AAGAATGGAG CTGCACGTGT      180
GAGGTTTTTC AAGTCCACAA AGATCAGGTA TTGTCTACGG TCAATAAAGA TTTTTTAAA      240
AAACCCTCTT AACTAAAGAG AGGTAACCTC CTTTCAAAA CTCTGAAATT TACATGTGCT      300
GACTTATAAT ATGTGTGATC CTCGCTGCTT TTCGATCCC TGGTGGTTGG GGTGTGTGTG      360
TGTGTGTGTC TGTGTGATGG GCTCTCGAG      389

```

(2) INFORMATION FOR SEQ ID NO:423:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 326 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

```

GAATTCGGCC TTCATGGCCT AATCTTAAGT GTTTTACATG CTCTACCTGC CGGAATCGCC      60
TGGTCCCGGG AGATCGGTTT CACTACATCA ATGGCAGTTT ATTTTGTGAA CATGATAGAC      120
CTACAGCTCT CATCAATGGC CATTGAATT CACTCAGAG CAATCCACTA CTGCCAGACC      180
AGAAGGTCTG CTAAAAGGTC AGAGTAATGC AGAATGCGTG CCTTCATCTC AGATTGTGTC      240
ATCACAGGTG GATCCCATGT GTCTTCAGTA GACAAGTCAC CTTTGTAGCT AGCACCAGTG      300
CCAGCTCCAT GCCATTGCAC CTCGAG      326

```

(2) INFORMATION FOR SEQ ID NO:424:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 178 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCCA ATCATTTTTA AATCTAATCT GAACTTTAAC      60
TGGTTAGTTG AGTGCAATTT TATGTGTACT GATGTATTTG CATTTATTCC TTACCACCTT      120
ATTTTGTGCT TTTTATGTTT TTTTCTTCCA CTCTTTTTTT TTCTTTTGA ATCTCGAG      178

```

(2) INFORMATION FOR SEQ ID NO:425:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 127 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

```

GAATTCGGCC TTCATGTACA TAGATCTTCC TAGTGTCAAT GACAAAGGTG ACATTGCAA      60
GGCTTTTTCT TCATCAGATG CAGGGATCTG GACTTCATGT GTATCCTTTT ATCCACTCCT      120
CCTCGAG      127

```


(2) INFORMATION FOR SEQ ID NO:426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GAATTCGGCC TTCATGGCCT AGAATTTAAT TGCAGAAAAT TATTCATATT CTTATAATCC      60
TTTTAATGTC TATAGGATTT ATGATGATAT CTCCTTCC ATCCTGATTT TTTCAAGTTT      120
TTGTTTTTTC TTTTTCCTTA TAAATCTGG TAAATGTTTA TTAATTTTAT TCATTTTAA      180
AAAGAACCAG CTTTGGTTT CATAAAGTTT TATAATTTT TTGTTTCAC TTCATTAAT      240
TCTACTCTTT ATTATTCCT TCATTTTGT TACTTGGGT TTGTTTGCC ATTTTTC      300
TAGTTCTTA AGGTGCCAGC TCGAG                                         325

```

(2) INFORMATION FOR SEQ ID NO:427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

```

GAATTCGGCC TTCATGGCCT AGGCACACAG GCGGGCAGC AACATAAAGC GCACCCATTA      60
AAAAGCAAGA CTCGCTCTTG AGACTAAAGG AGAAGTTACC TAAATTCTG TATAAATCTA      120
GTAATTCATT CACTTTACTA GTATTACATT TATGAAATTC ACCTTTGTGG AAAAAGGAGC      180
GGGAGAGGGA TAAGAAATG CCTGTTCTA GAAAACGCTC GAG                                         223

```

(2) INFORMATION FOR SEQ ID NO:428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

```

GAATTCGGCC TTCATGGCCT AAATTCATAC AGAAGACCTT ATTGTGATAA AGTTCAACGG      60
TATAGGTAAA CAACAACAAA AAAACTATCA ACCATAATT TTTACCCTA CCAACATTCT      120
CTGAACCTTT CAGTAATATT TTATACACAT GTGCATATTC TGCCTTTTTC ATTTACTATA      180
TCATAAACTT CTTTCTAGAT CATTATTTT CTGCTGCATT TTTTCAGGAT TTATCACCTT      240
TATTTTGTAGT TTTAGTTTTT GTGAGTGATC TCTCGAG                                         277

```

(2) INFORMATION FOR SEQ ID NO:429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

AAATGAGCCC	TATCACTGAG	AAATACGTGT	TTCATGATTT	AACTCTGTGT	GTGTGTGTGT	60
GTGTATTTTT	TTTTTGGTTG	TCTTCAGCTG	ACAGTATGAA	AAATGAAACT	GCTGAAAAAG	120
CTGAGCACCT	GGTCACCCCT	GGCCTTCCAT	TGCTTTGGCC	TTCAGTAAAA	AGCAGCCTCC	180
CTTCTAGGTC	AGGGAACCAT	GCCATTGAGA	CTAGTAACGG	GCGTCTGGG	CACAGTCCCA	240
CTGTGCACAG	GTTTGAGAGG	ACAAGTTCAT	CAGAAGGAAG	GCAGTCCTTA	GAAGTCACAT	300
ACGTTGAGCC	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:430:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 271 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

GAATTCGGCC	TTCATGGCCT	ACATTCAGAA	AACAGAAAAG	TTTCAAGAAG	CAGGAAGAAA	60
AGACTCACCT	ATGATCCCAA	CACCCAGAGG	TAATAATTTA	CCATTTTGG	TGTATCTCT	120
TTGTCTTTTC	CTATGTGTTG	CCTTATGTAG	ATATGTAACA	GGTGTGGTT	TAAACCGAAG	180
CTATACCCAT	TGTTGGAGT	CAGGCAGGTG	CGATAAATT	GTAGGTGGCT	CACCAGAAAT	240
CTATTTGCAT	GATGAACCTA	CAGGACTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:431:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 349 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

GAATCATTTT	TGGTCACCAA	TCTCTCATAT	ACCACTACTG	GATATTTACA	ACATGCTTCA	60
GTGGAGGAGA	AGACACTGCT	GCTTTGCAAA	GATGACCTGG	AATGCCAAAA	GGTCTCTGTT	120
CCGCACTCAT	CTTATGGAG	TACTTTCTCT	AGTGTTCCT	TTTGCTATGT	TTTTGTTTTT	180
CAATCATCAT	GACTGGCTGC	CAGGCAGAGC	TGGATTCAAA	GAAAACCTTG	TGACATACAC	240
TTTCCGAGGA	TTTCGGTCAA	CAAAAAGTGA	GACAAACCAC	AGCTCCCTTC	GGAACATTTG	300
GAAAGAAACA	GTCCCTCAAA	CCCTGAGGCC	TCAAACAGCA	ACTCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:432:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 261 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

```
GAATTCGGCC TTCATGGCCT ACCTGGATTT CTCAATTTAT TAAGTTGTAC TTACCTGATG      60
CTGATGATGA TTAAGTGTAT TACACATTGT CTCAGAGCTC ACTCTTGCGG AGGTTGTGGC      120
CTCGAAAATG CCTTGTGTC CCTCTGGAAT CTGTCTTTTC AGCTTCATCT CCTCCTCCTC      180
ACCTCCTGCT GTGGTGCACA GATACCTATA GGCAGGCTCC ATCTCCTCCT CCCCAGCTCC      240
TCCCCTAGTG CACACCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

```
GAATTCTAGA CCTGCCTCGA GTCCTACGGG AAACCTCCAG GGTTTTAGGA AGCTGACGAT      60
GCAAGTTTAT CCAAATGGGA ATGATAATAA TCATGTTTAT TATCCTGGGG TGCTTTCTCC      120
ATAGCAAGTA CTCACCTAGG TCCTGTTCAT TAGTCAGTCT TTTAATCTGT ACTGAAATAG      180
GTGCTGTGCG ATCCATGGGG AATGAACTCG AG                                     212
```

(2) INFORMATION FOR SEQ ID NO:434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

```
GGTTGCAGTG AGCTGAGATC GCACCACTGC ACTCCAGCCT GGGCAACAGA GTGAGACTTC      60
ATCTCCAAAA AAAAAAAAAA AAAAAAAGA CAACCACAAC AAAAACGAAA CACCACCACC      120
AAAAAAGTTT ACTGGTAGAG TCTCCTCTAG ATTGTTTCT TTTCAATACT TGTTTCATAT      180
TCTCCAAC TG CCCTCGTCCC ATAATGTTGG CTGTGCTTTT CTTTGTGCTT ACAGCTCATT      240
GCTGGGATGG ATATGGTGAG TTTTCATGTA CATTGACCAA ATACAATCTC GAG          293
```

(2) INFORMATION FOR SEQ ID NO:435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

```
GAATTCGGCC TTCATGGCCT AGGCTTGAAA GGAAATGAGG GAAATTTTCTG TGAGTTTGTAG      60
```

GAATGGCAGA	CTGGGTATGT	GACAAATGAG	TGGGTAAATA	AGGAAATCTC	AGATTGAGAA	120
TCCTGGCAGA	TCTTTCAATG	GGTTAGACTG	CAGGAATATT	GATTTTAAAG	CCAGACTGAA	180
GCAAATCTTA	GTGATAAAGG	AAGGGGAAAG	GGTGGCTGAA	TCAAATGTTC	TACCAATACT	240
CCTTTTTTTA	GTATTTGAGT	TAAAATTCAG	ATTANATGCT	TGGCTTAGAA	GAATGCAAAG	300
CTTCACTGAG	CCTAATAATA	TGGATCCCAG	TGGGTGAGTG	GAGGTGAGTT	CACTCGAG	358

(2) INFORMATION FOR SEQ ID NO:436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GCTCGAGAGA	GCTTTTTTTT	TTTTTTTAA	ACATTGTATC	ATTAATTTAT	CACGTGTATC	60
CAAGCTCCTT	TGAGTTTCCC	TGCCCCATC	CCTGTGTCAT	TCCAGCCATA	TCCAGCTACT	120
CCTTCCATGC	TTCCCCCATT	CTTGTTCTG	ACTCTATTAC	TCCCAGTCCA	AATCTTGCTC	180
TTCACTGTCT	GCACCTGTG	CTCTCCTCTC	TCTCAAAAAA	TCTACCCAAA	TTCCACCCCT	240
CTTCACAGGC	CCCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

CAAGCCGGCC	ATATTAGAGA	GATGGAAATA	AAGCTTCCTT	AATGTTGTAT	ATGTCTTTGA	60
AGTACATCCG	TGCATTTTTT	TTTAGCATCC	AACCATTCTT	CCCTTGTAAGT	TCTCGCCCCC	120
TCAAATCACC	CTCTCCCGTA	GCCCACCCGA	CTAACATCTC	AGTCTCTGAA	AATGCACAGA	180
GATGCCTGGC	TACCTCGCCC	TGCCTTCAGC	CTCACGGGGC	TCAGTCTCTT	TTTCTCTTTG	240
GTGCCACCAG	GACGGAGCAT	GGAGGTCACA	GTACCTGCCA	CCCTCAACGT	CACTCGAG	299

(2) INFORMATION FOR SEQ ID NO:438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCCTAC	TAAATAATAT	TAAGCAGGAA	TTTTTTAGGT	GTTGCTTTTT	AGCTCCTTTT	60
TATCAGTTCT	GGGAAGCAAA	CAGTGCTGCA	TCTCCTTTGC	TCTCATAGAA	TTCTGTAATT	120
TTTATACCAC	AGGTCTCTGC	TAAAAGGCGG	CATGTGTTTA	GAAATTCTAA	AAATGAGGGC	180
TCTGAACTTT	GTAAGTGTCC	TGATACGTTT	TCCCTTTTTT	AATCCCAACC	CCCTCGAG	238

(2) INFORMATION FOR SEQ ID NO:439:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 229 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

```
GAATTCGGCC TTCATGGCCT ACAACTTGCA CTTCGCTCCA GCATCACTGG CCTCCTGCTG      60
TTATTAGGT ATACTAGGCA TTTCCTGTTT TAGGGCCTTT GTACCTCCAG TTCCCTCTGT      120
TTGGAATGCT TTTCCCAGAG TAGCCCTGTG GTTAAATCTC TTACTTCCTT TGGGTCTGTG      180
CTCAGATGTT ACTTTCTCAG AGGGTCCCCC AAGCCCCCAT GCACTCGAG      229
```

(2) INFORMATION FOR SEQ ID NO:440:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

```
GAATTCGGCC TTCATGGCCT AGAGTCTATT AACTATTTTT CTGTTATACC CTGCCAGAAA      60
AGAATTTTAA AAGTTAGTTT ATGTTTGTG TAACCATGTT CTTCAGAATG CAGGTATGTG      120
AGCATCATGG TTTCTGGGTA ATTCTGCTGC TCCTGTCTTT GAAAATGGAG ATACCACTTG      180
CAGCTTATCC CACTGCTGAG TATTCCAGCA TTGGTAGTGG TTCACTCCA TTGCATCCAT      240
CCAGAACTTT CACACAGGCC TCCCATTAC CCAGCATCCT CGAG      284
```

(2) INFORMATION FOR SEQ ID NO:441:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

```
GAATTCGGCC TTCATGGCCT AATAAAATAA AAATTGGAAG AATGGCATT TATTACAGTA      60
TAGTTAAGAG ATTGGCTAAG GCAGTAAATA AAACCTAGAA ATGCTCAAAT TTATTGTAAA      120
TTGCTTTTAT AATCATTGAT ATATAAGCA TGCTACTGCT AATCAATTAG TTTTATGTAT      180
TAAGACCTAT CAGCATGTCT TTTTCTTAGT ATCTGGTTGA CTTAAACATG ATGTTCTCTG      240
TACCATTTAA CATTTTCAAG ACATATTCTC CCCAACTCG AG      282
```

(2) INFORMATION FOR SEQ ID NO:442:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

```
GAATTCGGCC TTCATGGCCT ACTCACCTGC AATCTATTGT TTATATTGTT GCTATGTATC   60
TCTATTCTTT CTGCATCAAA TAATGAATAG CTCATTTTGT GTTGCCTTCA AGTATGACAA   120
ATTCTTTTCC AAATGTGATT CCAGACAGTA TATCCAAACA TGTCTTTCTT TTCCCATTCC   180
TGATCATCCT ACATGTCAAG CACTGCCAAC GTTTACTCAA GAAAGCTTGG TTAGAACCCA   240
G                                     241
```

(2) INFORMATION FOR SEQ ID NO:443:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

```
GCAAGCACAA ATCTAACCAT GAGCTTCAGC AATCAGCTCA ATACAGTGCA CAATCAGGCC   60
AGTGTCTTAG CTCCAGTTC TACTGCAGCA GCTGCTACTC TTTCTCTGGC TAATTCAGAT   120
GTCTCACTAC TAAACTACCA GTCAGCTTTG TACCCATCAT CTGCTGCACC AGTTCCTGGA   180
GTTGCCCAGC AGGGTGTTTC CTGTCAGCCT GGAACCACCC AGATTTCAC TACAGACAGAT   240
CCTCTCGAG                                     249
```

(2) INFORMATION FOR SEQ ID NO:444:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

```
GAATTCGGCC TTCATGGCCT AGGGATTTTT TTTCTTTTTT TTCCTCATAT GTGAAGTAAT   60
AGTCTCTTCA CAACAGAAGA AGCCACAAAA CTAACTTAT TGGTCACTGA ATTTTCTTCA   120
AGGTACGTA CCTCTTTGGT ATTTTAAATC TAGATTATGT TGATTTTAT ATTTTGTTC   180
TCATTTTCT ATTTCTTTGT TTTCTTTACT GCAAATGGGC TCGAG                                     225
```

(2) INFORMATION FOR SEQ ID NO:445:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

```

GAATTCGGCC TTCATGGCCT AGTTTGGAG AGCTCTACCT ACTAGCTGGT TATTCTTAC      60
ATTAAATTAA TACCTTTAAA AAGTATTATG AAAATAACAC ACTCAGTAAA AGAAATTTTA      120
AAAAACAAAT GCAATAAAAA TGTGTTTCTT TTCAACCTTT GACTTGTCAC TTCCTCCAGC      180
TTTTCCCTTA TTTAACTGTG AGAGGTATTC TCTATTAGCA GTTACTTATC CCCTTCCTCA      240
AACTCGAG                                         248

```

(2) INFORMATION FOR SEQ ID NO:446:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

```

GGATTGAATT CTAGACCTGC CTCGAGCGAC CTCTAGAATC CTACATTTGA AATATTCTGG      60
CAGTGAGGTG TTCATCCTAA CTCAGTCAGG TAGCTGTGGA CAGCCTTCAC CTGTTAGGAG      120
CTCCTTAGAA ATAAATTCTG AATACCTTTG GTTTCTTTT ATCCTCCAGA GGAATTTCCA      180
CTATCTCCGA AGCTGTTCTT TGTTCCTG ACAATTCGCT TAGTTAATGT TCTTTTCTAG      240
CCTGTACTAT CTCGAG                                         256

```

(2) INFORMATION FOR SEQ ID NO:447:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

```

GAAGGCAAGA AAATCTATGG AAAGAGAAGG CTACGAGTCC TCGGGCAATG ATGACTACAG      60
GGGTAGTTAC AACACCGTGC TCTCACAGCC TTTATTGAA AAGCAGGACA GAGAAGGTCC      120
AGCCTCCACG GGAAGCAAAC TCACCATTCG GGAACATCTG TACCCGCGC CTTCATCACC      180
TGAGAAAGAA CAGCTGCTGG ACCGCAGACC CACTGAATGT ATGATGTCGC GATCAGTAGA      240
TCACCTCGAG                                         250

```

(2) INFORMATION FOR SEQ ID NO:448:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 198 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

```

GAATTCGGCC TTCATGGCCT AGCTGGGGGG AATAGGTTAT GTGATAAGGA GTCAGTCGGA      60
CAGAGTGGGG TGAAAGATGT TCAGACAGGG AAACACACAT GCAANAGAGG GAAGGTGGGA      120
CACAGCATAT GCNTCCAACA TTTGGTAGGG CCGAGGCCCC ACATGGGAGC AGTGAGAGGT      180
TAGGGATCGA CGCTCGAG                                         198

```

(2) INFORMATION FOR SEQ ID NO:449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

```

GAATTTTCCT TACCAGGAAA ATTCATGCTT TACAATTGT CAGAGGTGCA CATTACTAAT      60
TACAATAGGT CACACTTTTT CTATGCGCTT CATTATAATA TTGGCAACTT TATTATGCCC      120
CATTACATAC TGTATTATGC TCTTACTTTA TATGCATTTT GAG                        163

```

(2) INFORMATION FOR SEQ ID NO:450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

```

GAATTGCTGA TATCTTATAA AGGGGACCTT TTTCTTTAC ATTCTGACG GTTTTATCA      60
GAATGTATGT ATTAATGCTA TTTGTCTTTG TATATTTATT TTATTCCAG CCACTTCTCG      120
AG                                122

```

(2) INFORMATION FOR SEQ ID NO:451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

```

GAATTCGGCC TTCATAGCCT AACTCAAGAT CTCCCATCTA TTAAAGCAGA GGAATAACTT      60
TTGTAGGCTT AATACTGCTT TCTCACTTAG GAAAAGTTGA AATTAAGAAC ACACAGGAAG      120
GGATCATTTT CTAAGGTTTA TGTCCCTAAC ATCAAATTGA GTTGAAACTT GACTACAGGC      180
CATCTGCTCA TTCAAAGCAT TACAATAAAT CTGTCCTATT GATGATCAAA ATGAGAGCTG      240
AATTGGATGC AGGATTGGAC ATTGCAAGCT GTTCTCCCAA GTGGGATGGA AAGGTGCTCG      300
AG                                302

```

(2) INFORMATION FOR SEQ ID NO:452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

GAATTCGGCC TTCATGGCCT AAAAAAATAT TTATTTGACT GAATGATTTA ATATGCAGTT	60
ATGGTGTTTA ATATATCATG TGTTATTTGT TTGTTTAAAT ACAGACATAA CCCACAGTTA	120
TCTTGAACAA GAAACTACGG GGATAAATAA AAGTACGCAG CCAGATGAGC AACTGACTAT	180
GAATTCTGAG AAAAGTATGC ATCGGAAATC CACTGAATTA GTTAATGAAA TAACATGTGA	240
GAACACAGAA TGGCCCGGAC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

GAATTCGGCC TTCATGGCCT ACTTTAATTT CTCTGAGCAG TATTTTACAG TTTTGATGTA	60
TAAACCTGGC ACAGATTATG TTCAGTTTAT TTCTAAGTTT AAGTCATGTT TTTGAATGTT	120
ATATTAAAGG ATATTTTCTT TTTTAAAAA TCTACAATGT TTATTTTATT ATTATTATT	180
TTAATCTCGC TTCATACCA AGGCTGGAGT AAAGTGACGC GACCTCAGCT CGAG	234

(2) INFORMATION FOR SEQ ID NO:454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCGGCC TTCATGGCCT ACGCACATCC GCAGTCAGCC ACCTCGCGCG CGCCTCCAGG	60
AGCAAGGATG GAGAGGCTGG TGATCAGGAT GCCTTCTGT CATCTGTCTA CCTACAGCCT	120
GGTTTGGGTC ATGGCAGCAG TGGTGCTGTG CACAGCACAA GTGCAAGTGG TGACCCAGGA	180
TGAAAGAGAG CAGCTGTACA CACCTGCTTC CTTAAATGC TCTCTGCAAA ATGCCCAGGA	240
AGCCCTCATT GTGACATGGC AGAAAAAGAA AGCTGTAAGC CCAGAAAACA TGGTCACCTT	300
CAGCGAGAAC CATGGGGTGG TGATCCAGCC TGCCTATAAG GACAAGATAA ACATTACCCA	360
GCTGGGACTC CAAAACCTCA CCCTCGAG	388

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

GAATTCGGCC TTCATGGCCT AGCTGATATT ATTTCTGAGT TTTTGCTTAT TTGCTTTCTA	60
CATAGAATCA ATAAAATTGA CAACTAGCAT TGCCTATATA TGCAGGTGTG ATACTATTCA	120
GGGTACTAGT ATATTGGCCA CTCATTATGA AACTTTCAGG TCCTCATATA TTTTCTTTTA	180
TTACAATGAT CTACTTATTT CTGATAAATA TTGGATTCAT AGAGGCTAAA GGGCTGGGAA	240
AGGAAAACAT TCGTGACTAC TTACAACCAT TTGATACGAG TTGTGTCAAT ACAGACCTCA	300
CACAGCAGCA CCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

GAATTCGGCC TTCATGGCCC ACAAATGGT AATACAAATA AACCCTACT TACTGCTTTT	60
AATGGTAGTT TGTTTT TTTTGGAGAC AGAGTCTCGC TGTGTCGCCC AGGCTGGAGT	120
GCAGTGGCGC GATCTTGGCT CACTGCAAGC TCCGCCTTTC GGGTTCACAC CATTTCCTG	180
CCTCAGCCTC CCGAGTAGCT GGGACTGCAG GCGCCCGACT CCCGGGTTCA CACCATTCTC	240
CTCCCTCAGA CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

GAATTCGGCC TTCATGGCCT AGGAGAATCG TGAGACCTCT ATTTCCATAT CTTTTTCTAC	60
TACTGGAATT TTTATTTTTA CCATACCCAT AAATTACTTT CTATTTTAAG AAGCAAATAT	120
ATAATTCCTC AGTTTAGTAA AAAGTTCTCA CTTGAAAAGC TGGTATATGA ACTTTAGAGG	180
GCAGATTAAT CAACTGCTAA ATATTATTAA TCTTCTTCT TGGAACTTTC CAACACAAAA	240
GACAGTTTAT AGAAAACAAA GTCAGTGTTT AAAACAGCTG AATGAACTAT CTTTGTATAT	300
TTTATTTGTT TTTGTTTGT TTTGTTTGT TGAGACAGAG TCTTGCTCTG TTGTCCAGGC	360
TGGAGAGTAA TGGCACGATG ACTGCAACCT CTGCCTCCCG GGCTCAAGTG ATTCTCTGTC	420
CTCAGTCTCT CGAG	434

(2) INFORMATION FOR SEQ ID NO:458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

GAATTCGGCT TCATGGACGA GGAGATCGTG TCCGAGAAGC AAGCCGAGGA GAGCCACCGG	60
---	----

CAGGACAGCG CCAACCTGCT CATCTTCATC CTGCTGCTCA CCCTCACCAT TCTCACAATC	120
TGGCTCTTCA AGCACCGCGG GGCCCGCTTC CTGCACGAAA CCGGCCTGGC TATGATTAT	180
GGTCTTTTGG TGGGCCTTGT GCTTCGGTAT GGCATTTCATG TTCCGAGTGA TGTAATAAT	240
GTGACCCTGA GCTGTGAAGT GCAGTCAAGT CCAACTACCT TACTGGTAAA TGTTAGTGGA	300
AAATTTTATG AGTATATGCT GAAAGGAGAG ATACTCGAG	339

(2) INFORMATION FOR SEQ ID NO:459:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

GAATTCGGCC TTCATGGCCT ACTTATTTT GTTCTGTGT GTTGTTTTA AATGTGTGTG	60
CGCTCATGTG AGTTTGAAGG GAGTTAGATG CAACAGCAGG AGCTGTGCTC AGGGCAGTGG	120
TGTTAATTAT GGAGGGCGTG GGAAGGGCTG GGAAGAGGAG GGGGTTGTAA GACTCCCCTT	180
TTCCCTCGCA TGTAACAGA TGCTGGTGAC TGAAAGTCTG TCTGCGGTA TTGGCAAGAG	240
TGACGGAAAG CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:460:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

GAATTCGGCC TTCATGGCCT AATTGAAAA TTCATAAGTT TCTACCAATA CTTCCAATT	60
CAATCCAACA TCTGAGGATC TCCCTAGATT TCCTATTTCC ATGATTATAA CTCTGTACC	120
AGATGATAAG AAACATGGAT CTGACTATAC TCAATTTATT CACATATTTT CTCAGTGAAC	180
TAACTTATTT GCTGAATATA ACCAGTCCCC AGCCTTCCAA CTGCCTCTCT CACTTGCCAC	240
CTCTGCATCT TCCCCACTG TCTTCTCAG CAATCAGACT GCCTCTTGCC AAGTCATCAG	300
CACAGCACCC CACTCTCGAG	320

(2) INFORMATION FOR SEQ ID NO:461:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT ACCCTCTACT ATTTTGAAC CAAATCAACA ACAACCTATT	60
TAGCTGTGCC CCAACCTTTT CCTCCGACCC CCTAACCAACC CCCCTCCTAA TACTAACTAC	120
CTGACTCCTA CCCCTCACA TCATGGCAAG CCAACGCCAC TTATCCAGTG AACCACTATC	180
ACGAAAAAAA CTCTACCTCT CTATACTAAT CTCCTACAA ATCTCCTTAA TTATAACATT	240

CACAGCCACA GAACTAATCA TATTTTATAT CTTCTTCGAA ACCACACTTA TCCCCACCCA 300
TCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:462:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 254 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GAATTCGGCC TTCATGGCCT AGTACAATTT AATATAATTT CTTACAAGTT TATTACCTAA 60
 AACTTTGCAA ATAATTGAAG TTAGAAGCTT TGGATTTTGT TTTTAGAGCT TAATCCITTT 120
 CTGTAAGTGG AAATCCTTTC CACTGGTTTA TTTTCCTTTT GATTTTATT TACTTTGACA 180
 CCCTAAAGGT TTAGTGTTCC TGTTTTTAAA TCTACTGATC GTTCTTATG AGATTCCTTA 240
 GAGTACCCCT CGAG 254

(2) INFORMATION FOR SEQ ID NO:463:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 283 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

GAATTCCTAGA CCTGCCTCGA GAGGACGCCG GAGAGAAATG AGTAGCAACA AAGAGCAGCG 60
 GTCAGCAGTG TTCGTGATCC TCTTTGCCCT CATCACCATC CTCATCCTCT ACAGCTCCAA 120
 CAGTGCCAAT GAGGTCTTCC ATTACGGCTC CCTGCGGGGC CGTAGCCGCC GACCTGTCAA 180
 CCTCAAGAAG TGGAGCATCA CTGACGGCTA TGTCCCCATT CTCGCAACA AGGTAGCGCA 240
 GCTGCTTTGG GGAGCTCCTC CCTACTGCCC AGCAAACTC GAG 283

(2) INFORMATION FOR SEQ ID NO:464:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

GAATTCGGCC TTCATGGCCT AAAAAGTGGT TCCTATTTTC CTGGTTGAAC CTTGAGTGAT 60
 ACACCCAGTA TTGTACCACC CAATTAGTAG ACATTATTTT TCCTTAGGTC ATATTATTCT 120
 CAGCTTATAG AGCAAGAAGT TGAAGCTTAA AGGGTTAGAT TACTTGCCCA AGGTAATACA 180
 GCAAGAATCT TATTTTCATCC AACCTAGAGT GAATATTTCC CCCACATCTC GAG 233

(2) INFORMATION FOR SEQ ID NO:465:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 497 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

```
GAATTCGGCC TTCATGGCCT ACTGATGTTG AAGACGACAC CACGGCTTTG ATGGAATATC      60
AGATATTGAA AATGTCTCTC TGCCTGTTCA TCCTTCTGTT TCTCACACCT GGTATTTTAT      120
GCATTTGTCC TCTCCAATGT ATATGCACAG AGAGGCACAG GCATGTGGAC TGTTCAAGCA      180
GAAACTTGTC TACATTACCA TCTGGACTGC AAGAGAATAT TATACATTTA AACCTGTCTT      240
ATAACCACTT TACTGATCTG CATAACCACT TAACCCAATA TACCAATCTG AGGACCTCTG      300
ACATTTCAAA CAACAGGCTT GAAAGCCTGC CTGCTCACTT ACCTCGGTCT CTGTGGAACA      360
TGTCTGCTGC TAACAACAAC ATTAACTTC TTGACAAATC TGATACTGCT TATCAGTGGA      420
ATCTTAAATA TCTGGATGTT TCTAAGAACA TGCTGGAAAA GGTGTCTCTC ATTAAAAATA      480
CACTAAGAAG TCTCGAG                                     497
```

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```
GAATTCGGCC TTCATGGCCT AGCCCCGACT AGCTTTGCCC TAACTCCTTC ATCAAAGAC      60
CCCCCGCCAG CTTCACACAC CTCATACGCA GCCACATCTG CCCTATTCTC CATGCTTTCC      120
AGCTTGCCCTG CCCTTCCTCA TCTCTCCCTG CCTGTGCAGA CCTCCACCCT TCTTTCCTCC      180
ACCCCTCCAT CCCCAATGC TTGTAGACCT TCCATTCATT CCGTCTCATC GTGCGTGGTC      240
TCTGATCGTC CATCACCTGA CCTCGAG                                     267
```

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 152 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```
GTTTACATAA ATATTATACT AGCATTTACC ATCTCACTTC TAGGAATACT AGTATATCGC      60
TCACACCTCA TATCTCCCT ACTATGCCTA GAAGGAATAA TACTATCGCT GTTCATTATA      120
GCTACTCTCA TAACCCTCAA CACCACTCG AG                                     152
```

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 198 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

CAATATTCA AGCTATACCA AGCATACAAT CAACTCCAAG CTCGGAATTT TAACTTCATG	60
GCAAACAGAA AAGCTAGACT GAGTTATCAG TGTTGTGAGA GGAATATTTG GCCCAACAAG	120
AGTTGTTGGG GTGGGAGGAG GGAGAGACAA AAGGAAAGGA CTGCCAGCTC TCAGAGGGTG	180
GAGATGGGGG ACCTCGAG	198

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

GAATTCGGCC TTCATGGCCT ACTGCTATAT TCAAGTTTCT CCCACTACTG TGGTTTCTTT	60
TTTTTTT TTTT TTTTGAGACA GGGTCTTGCT CTGTCACCCA GGCTGGGGTG	120
CAGTGGTGCG ATCTCGGCTC ACTGCAAATT ACACCTCCIG GATTGAGCA ATTCTCATGC	180
CTCAGCTTCC TGAGTAGCTG GGATAACAGG TATGCCACCAC CACCCCTGGC TAATTTTGT	240
GTTTTAGTA GAGACAAGTT CTCACCATGT TGTCCAAGCC ACCTCGAG	288

(2) INFORMATION FOR SEQ ID NO:470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

GAATTCGGCC TTCATGGCCT AAAAGAAGAA TACTAATTAG AATTGAGTT CTAGGGGTTT	60
TTCTTAGGTT TTTCATTCTA GACTTAGCTT TTATTCAAAC CTGTTGATCC TGCATAGGGG	120
TAGTCTAGCT TTAAAAAATA AAACAATAAA CATAAATGAG CCTATTGAGT TCAATCAGAG	180
TAGGGAGCAG TTTTATTGAA CAGCACATTT TCAAATTCCT CAGTTGTGTT TTGTTTTTCA	240
GCTACGTGTC TCTCTGTGAT AATGAAAAGA CAGGTTGCAA AGCCCGGGAA CTAAAATCAG	300
TTTATGTGGA TGCAGTAGGA CTCGAG	326

(2) INFORMATION FOR SEQ ID NO:471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

```

GAATTCGGCC TTCATGGCCT AGTGTAAGT GTTTTTGCAC AGTGCCCGA AATTTGCAGT      60
ATTTAATGGT CCTTCCTCCT TATTTATTTT TATTACTTGT TTTTGTTTT TTGAGACAGT      120
GTCTTGCTCT GTCGCCAGG CTGGAGAGCA GTGATATTAT CGTGACTCAC GGCAGCCTCG      180
ACCTCCCAGA CTCAGGTGAT CCCTTCACCT CAGCCTCCCA GGCAGCTGGG ACCATAGCTA      240
TGAACAAACA CGTCCAGCTA TGTTTGTAT TTTTGTGAA GACGGAGTCT CACCATGTTG      300
CCCAGGCTGA TCTCCAACTC CTCGAG                                           326

```

(2) INFORMATION FOR SEQ ID NO:472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

```

GGAAAGGTGT TGTCCCTTGT AACATTTTGG TTGGCTATAA AGCTGTATAT CGTTTGTGCT      60
TTGTTTGGC TATGTTCTAT CTTCTTCTCT CTTTACTAAT GATCAAAGTG AAGAGTAGCA      120
GTGATCCTAG AGCTGCAGTG CACAATGGAT TTTGGTTCTT TAAATTTGCT GCAGCAATTG      180
CAATTATTAT TGGGGCATTG TTCATTCCAG AAGGAACTTT TACAACTGTG TGGTTTTATG      240
TAGGCAACCT CGAG                                                         254

```

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

```

GAATTCGGCC TTCATGGCCT ACAGAAATCT AATTCCTGGT GCTATTGCA ACTACATATA      60
TTTAAATAC AAGGAGATAA ATACCCAGAA CACATTAAGC CTACTGATTT AAACAGAACA      120
TTTCAAGACT GCTACACAGA AAGGGAAGGA AGCTGTTAAC CCAGCACAGC AGCACACCTC      180
ACATATTTAC GTCTCAGAGA TTAAATGGAA AGAAAGGATC AATCAAAACC TTTAATGCTC      240
AGTTTTCACA AACACAGTCA AGTCTATCAA ATTTCCAGAT TTACAG                     286

```

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

```

GAATTCGGCC TTCATGGCCT ACAATTAAAA GGTTCGTGTA AATTACGTCT TTCAGTCTGA      60
AATTACTCTG AGAATTTACT TAAATTTT CCATTTAAAA ACAGGTATAA AATTAATTGC      120
TAGTTTCCAT AATCACCAG TATAAGATA GAAAAGACCT GTAAGACAAC TGTGTGTTA      180

```

AATACATGAT AACACATTTA CGTGCCTTTT ATAGAAATCC ACTTATTATG TACATACTGG	240
CTTGTTTTTT TTCCCACTTC TCCAGTACAC TATTTTCAGGC ACAGGCTCAA AATTTGAACC	300
CAAATGGTCT GTTAGGTCTC TTGACTTTT CAGTTCAAAG CTCTGCTAAT CTGCTAAACC	360
TAGCCCCAAA CCCACTCGAG	380

(2) INFORMATION FOR SEQ ID NO:475:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 254 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCTAGA CCTGCCCGGA GCCCTGACCT AGTCCGGCGT GGAGAGAGGA ATGGAAGCA	60
GTGTCCCTTT TGAGAAGGCA AATTACAGC TGGCTTTTGT AATCCTAGCT ATTTTGTGTT	120
TGTTTGCTAA GTCTTTGATA GTCCCCAGTG TGGTTTGTCT GCCAGTGATC TCAGCACCAC	180
CAGAGAGCTT GTTAGAAATG CGGCATCCCA ACCCACCAC AGCCCTCCCA AGTCAGATAC	240
TCCCCCTCT CGAG	254

(2) INFORMATION FOR SEQ ID NO:476:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 389 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

GAATTCGCTG TGGAGCTGGG CGTGCTGTTT GTCCGGCCCC GGCCCGGAAC CGGGCTGGGT	60
AGAGTGATGC GGACCTCCT GCTGGTGCTG TGGCTGGCGA CGCGCGGAAG CGCGCTCTAC	120
TTTCACATCG GAGAGACGGA GAAGAAGTGC TTTATTGAGG AGATCCCGGA CGAGACCATG	180
GTCATAGGAA ACTACCGGAC GCAGCTGTAT GACAAGCAGC GGGAGGAGTA CCAGCCGGCC	240
ACCCCGGGGC TTGGCATGTT TGTGGAGGTG AAGGACCCAG AGGACAAGGT CATCCTGGCC	300
CGGCAGTATG GTTCCGAGGG CAGGTTCACT TTCANTTCCC ATACCCNTGT GTGAGCACCA	360
GATCTGTTTT CANTCCAATT CCACTCGAG	389

(2) INFORMATION FOR SEQ ID NO:477:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 431 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

GAATTCGGCC TTCATGGCCT AGAAGGAAAT AAAGGCCCGG ATTTCTGGAG TTCTGAGCCT	60
ACTTTTTTTG GGTGCATTTT GAAACATACG GATTTTACCG CTAGTATATT CAGTGAGGAA	120
GGAAGGCTTC TGAAGGATTG ATGATCCCCA AACTGGATTA TGTGTTTCATG ATAATGGTGT	180
ATTTGGTGTC CTAGCATAGT GAGGTGAGGT AGGTCTTTAA AATGGCTCAT TATAAACATC	240

ATTGTTCTCTG AGCTCACTTG CCCTTGCATC TCCTGCCAGA GTGCTTTGTA CATAGTAGGC	300
CCTCATCAAT GCTTGTAGAT TTAAATTCG GAGGCACACT TGGAAGACAA TGGTGGCTGG	360
TAAATTAATT ATCAGGGTTA GCAACTTCAT TTCTGCTNAC GCTTAAAAAG TGCTGCGCGA	420
GGAAACTCGA G	431

(2) INFORMATION FOR SEQ ID NO:478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

GCCTCTGNTT TTAATTCATT GGCAACTGTT ACGATGGAAG ACCTGATTCG ACCTTGGTTC	60
CCTGAGTTCT CTGAAGCCCG GGCCATCATG CTTTCAGAG GCCTTGCCTT TGGCTATGGG	120
CTGCTTTGTC TAGGAATGGC CTATATTTC TCCAGATGG GACCTGTGCT GCAGGCAGCA	180
ATCAGCATCT TTGGCATGGT TGGGGGACCG CTGCTGGGAC TCTTCTGCCT TGAATGTTC	240
TTCCATGTG CTAACCCTCC TGGTGCTGTT GTGGGCTGT TGGCTGGGCT CGTCATGGCC	300
TTCTGGATG GCATCGGGAG CATCGTGACC AGCATGGGCT TCAGCATGCC ACCCTCTCCC	360
TCTAATGGGT CCAGCTTCTC CTGCCCACC AATCTAACCG TTGCCACTGT GACCACACTT	420
CTCGAG	426

(2) INFORMATION FOR SEQ ID NO:479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

GAATTCGGCC TTCATGGCCT AAATTTTCAG GCAGTTTGAA GTATCTGGCA GAAAAAGTAA	60
ATTGAAATCA TTGGGACGTT GATTTTAAAT TTACCTAGAA GCAATCCCAA TGCTTTATGT	120
AATACTAAAA TTTCTCCTCT CTCTTTCTT TATCTCTC TCCTCTGAAA ATAATCATTT	180
TTTTTCCAGT GCCAGTTCAG ATCTTGGCAA CAGTTGTTT GAAAAAGTAC CTGAACAAAA	240
TACATTTTAT AAAGTAAAGT ATTCAGGAAC TGACAGAACT GGAGAAGAAT ATATTTATGT	300
TACAGAAGTC ATGGACAACC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

GGCAAGTAAC AGGTTGCAAG AATTGGAGGC AGAGCAACAG CAGATCCAAG AAGAAAGAGA	60
ATTACTGTCC AGACAAAAGG AAGCTATGAA AGCAGAGGCA GGCCAGTTG AACACAATT	120

ACTACAGGAG	ACAGACAAAT	TAATGAAGGA	AAACTAGAA	GTACAATGTC	AAGCTGAAAA	180
AGTACGTGAT	GACCTTCAAA	AACAAGTGAA	AGCTCTAGAA	ATAGATGTGG	AAGAACAAGT	240
CAGTAGGTTT	ATAGAGCTGG	AACAAGAAAA	AAATACTGAA	CTAATGGATT	TAAGACAGCA	300
AAACCAAGCA	TTGGAAAAGC	AGTTAGAAAA	AATGAGAAAA	TTTTTAGATG	AGCAAGCCAT	360
TGACAGAGAA	CATGAGAGAG	ATGTATTCCA	ACAGGAAATA	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:481:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 357 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

GAATTCGGCC	AAAGAGGCCT	AGTCGGTGCC	TCATTGGTAT	AAATGTTATG	TCTGCATGGG	60
TTTTTCTAC	AATTTCTTC	TAAGATTATT	TCTCCCCAA	GCTCAGCACT	TTTGAATTT	120
TTTCTCTCA	TCCAAAAATG	GAAGCAATTT	TATGTAAATG	TCTCTGGAA	GCAGTGTGG	180
AATTCATATT	TTGGGTAGCA	GAAGCAGTAG	TTACAAGGGT	AGTGGTGTCT	TTTGTGGTGG	240
TGGTGGCACC	TGCTGCAGTT	GTTTATATTT	GGGGTGCAGG	AGTAGGGAGG	GTAGGATCAG	300
TTGGAGAATT	TACAGGGAAA	AATGGAGGTC	CAGGTGGATA	GGGTCTAGAA	TTCAATC	357

(2) INFORMATION FOR SEQ ID NO:482:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC	AAAGAGGCCT	AAGTGACTCC	AGAGCCTCCT	GCAAGATGCT	GTTGATTCTG	60
CTGTCTAGTG	CCTTGCTGGC	CCTGAGCTCA	GCTCAGAACT	TAAATGAAGA	TGTCAGCCAG	120
GAAGAATCTC	CCTCCCTAAT	AGCAGGAAAT	CCACAAGGAG	CACCCCCACA	AGGAGGCAAC	180
AAACCTCAAG	GTCCCCCATC	TCCTCCAGGA	AAGCCACAAG	GACCAACCCC	ACAAGGAGGC	240
AACCAGCCTC	AAGGTCCCCC	ACCTCCTCCA	GGAAAACCAC	AAGGACCACC	CCCTATTCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:483:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 469 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

GAATTCGGCC	AAAGAGGCCT	AAGCAGACAC	AATGGTAAGA	ATGGTGCCTG	TCCTGCTGTC	60
TCTGCTGCTG	CTTCTGGGTC	CTGCTGTCCC	CCAGGAGAAC	CAAGATGGTC	GTTACTCTCT	120
GACCTATATC	TACACTGGGC	TGTCCAAGCA	TGTTGAAGAC	GTCCCCGCGT	TTCAGGCCCT	180

TGGCTCACTC AATGACCTCC AGTTCTTTAG ATACAACAGT AAAGACAGGA AGTCTCAGCC	240
CATGGGACTC TGGAGACAGG TGAAGGAAT GGAGGATTGG AAGCAGGACA GCCAACTTCA	300
GAAGGCCAGG GAGGACATCT TTATGGAGAC CCTGAAAGAC ATCGTGGAGT ATTACAACGA	360
CAGTAACGGG TCTCACGTAT TGAGGGGAG GTTTGGTTGT GAGATCGAGA ATAACAGAAG	420
CAGCGGAGCA TTCTGGAAT ATTACTATGA TGAAAGGAC AAATCGAG	469

(2) INFORMATION FOR SEQ ID NO:484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GAATTCGGCC AAAGAGGCCT ACTACTTCTG TAGTCTCATC TTGAGTAAAA GAGAACCCAG	60
CCAACTATGA AGTTCCTTGT CTTGCGCTTC ATCTTGGCTC TCATGGTTTC CATGATTGGA	120
GCTGATTCAT CTGAAGAGTA TGGGTATGGC CTTATCAGC CAGTCCAGA ACAACCACTA	180
TACCCACAAC CATACCAACC ACAATACCAA CCTGCCTCAA GGTCTCCAC CTCCTCCAGG	240
AAAGCCACAA GGACCACCCC CACAAGGAGG CAACAAACCT CAAGGTCCCC CACCTCCAGG	300
AAAGCCACAA CGACCACCCC CACAAGGAGG CAGCAAGTCC CGAAGTTCTC GATCTCCTCC	360
AGGAAAGCCA CAAGGACCAC CCCCAAGAG AGGCAACAAA CCTCAAGGTC CCCACCTCC	420
AGGAAAGCCA CAAGGACCAC CCCCAAGAG AGGCAAGTCC TCCCGAAGTG CCCGATCTCC	480
TCCAGGAAAG CCACAAGGAC CATCCACAA CTCGAG	516

(2) INFORMATION FOR SEQ ID NO:485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

GAATTCGGCC AAAGAGGCCT ACTTCACTTC AGCTTCACTG ACTTCTTGAC TCTCTCTTG	60
AGTAAAAGGA CTCAGCCAAC TATGAAGTTT TTTGTCTTTG CTTTAGTCTT GGCTCTCATG	120
ATTTCCATGA TTAGCGCTGA TTCACATGAA AAGAGACATC ATGGGTATAG AAGAAAATTC	180
CATGAAAAGC ATCATTCACA TCGAGAATTT CCATTTTATG GGGACTGTGG ATCAAATTAT	240
CTATATGACA ATTGATATCC TTAGTAATCA TGGGGCATGA TTATAGAGGT TTGACTGGCA	300
AATTCACCTT TACTCATTTA TTCTCATTCA TCACAACGCA AGTCTAGGCC TCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 643 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GGTTACCATC CTCAAAGGAT TGGCTAAAAG CAAGCAACTG GATTGAACAC CCTAAGAAGA      60
AAGATTCACTA CTGCACCAGG AGACATCAGA AAGAATGAAA ACTCTGCCGC TGTTTGTGTG      120
CATCTGTGCA CTGAGTGCCT GCTTCTCGTT CAGTGAAGGT CGAGAAAGGG ATCATGAACT      180
ACGTACACAGG AAGGCATCAT CACCAATCAC CCAAATCTCA CTTTGAATTA CCACATTATC      240
CTGGACTGCT AGCTCACCAG AAGCCGTTCA TTAGAAAAGTC CTATAAATGT CTGCACAAAC      300
GCTGTTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTTCC AAATCCTCAC      360
CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT AGTGGCTACA      420
ACCCAAATTC CATCTGTGAC TTCCCATCA GCTTCCACCA AAATTACTAC CCTTCCAAAT      480
GTGACTTTTC TTCCCCAGAA TGCCACCACC ATATCTTCAA GAGAAAATGT TAACACAAGC      540
TCTTCTGTAG CTACATTAGC ACCCAGTGAA TTCCCCAGCT CCACAAGACA CCACAGCTGC      600
CCCACCACA CTTCTGCAA CTACACCAGC TCCACCCCTC GAG                          643

```

(2) INFORMATION FOR SEQ ID NO:487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GAATTCGGCC AAAGAGGCCT ACAAGATGCT GCTGGTCCTG CTCTCAGTGG TCCTTCTGGC      60
TCTGAGCTCA GCTCAGAGCA CAGATAATGA TGTGAAGTAT GAAGACTTTA CTTTCAACCAT      120
ACCAGATGTA GAGGACTCAA GTCAGAGACC AGATCAGGGA CCCCAGAGAC CTCCTCCTGA      180
AGGACTCCTA CCTAGACCCC CTGGTGATAG TGGTAACCAA GATGATGGTC CTCAGCAGAG      240
ACCACCAAAA CCAGGAGGCC ATCACCAGCA TCCTCCCCCA CCTCCTTTTC AAAATCAGCA      300
ACGACCACCC CAACGAGGAC ACCGTTTCATC TCGAG                          335

```

(2) INFORMATION FOR SEQ ID NO:488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```

GAATTCGGCC AAAGAGGCCT AGACACATTG CTTTCTGTTT TCTCCAGCAT GCGCTTGCTC      60
CAGTCTCCTGT TCAGGGCCAG CCCTGCCACC CTGCTCCTGG TTCTCTGCCT GCAGTTGGGG      120
GCCAACAAAG CTCAGGACAA CACTCGGAAG ATCATAATAA AGAATTTTGA CATTCCCAAG      180
TCAGTACGTC CAAATGACGA AGTCACTGCA GTGCTTGCAG TTCAAACAGA ATTGAAAGAA      240
TGCATGGTGG TTAAACTTA CCTCATTAGC AGCATCCCTT CTACAAGGTG CATTTAACATA      300
TAAGTATAAC TGCCAACCTC GAG                          323

```

(2) INFORMATION FOR SEQ ID NO:489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

GAATTCGGCC AAAGAGGCCT AGTGACACCA GAGCCTCCTG CAAGATGCTT CTGATTCTGC	60
TGTCAGTGGC CCTGCTGGCC TTCAGCTCAG CTCAGGATTT AAATGAAGAT GTCAGCCAGG	120
AAGATGTT	128

(2) INFORMATION FOR SEQ ID NO:490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

GAATTCGGCC AAAGAGGCCT AATTTTGACC AGCAGATTAA TCAACTGTAA GACGGATCCT	60
CACACAAAGA GGCAACTGAA AGGATGAAAT CACTGACTTG GATCTTGGGC CTTTGGGCTC	120
TTGCAGCGTG TTTCACACCT GGTGAGAGTC AAAGAGGCC CAGGGGACCA TATCCACCTG	180
GACCGCTGGC TCCTCCTCAA CCTTTTGCC CAGGATTGT TCCACCACCT CCTCCTCCAC	240
CCTATGCTCC AGGGAGAATC CCACCTCCTC CTCTGCAGAG AAAACCTTTG AAGAAAAGCA	300
GGAACAGAGA TCGATGGCGA TCTATTCCC TGTACTATAC TGGAGAGAAA GGTCAAAATC	360
GTCGAG	366

(2) INFORMATION FOR SEQ ID NO:491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

GGTTTCCCGT TTGTCCTCC TTCAAGGTTT TTTTCAGCAG CTGCAGCACC CGCTGCCCCA	60
CCTATTGCAG CTGAGCCTGC TGCAGCTGCA CCTCTTACAG CCACACCTGT AGCAGCTGAG	120
CCTGCTGCAG GGGCCCTGT TGCAGCTGAG CCTCCTGCAG AGGCACCTGT TGGAGCTGAG	180
CCTGCTGCAG AGGCACCTGT TGCAGCTGAG CCTGCTGCAG AGGCACCTGT TGGAGTGGAG	240
CCAGCTGCAG AGGAACCTTC ACCAGCTGAG CCTGCTACAG CCAAGCCTAG GCCTCT	296

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

CTCGAGTCCT TGTGGCTTTC CTGGAGGTGG GGGACCTTGA GGTTTGTTC CTCCTTGTGG	60
GGGTGGTCTT TGTGGCTTTC CTGGAGGAGG TGAAGGACCT TGAGGCTGGT TGCCTCCTTG	120

TGGGGGTGGT	CCTTGTGGCT	TTCTGAGG	AGATCGGGGA	CTTCGGGGAC	TTGTCTCCTT	180
GTGGGGGTGG	TCCTTGTGGC	TTTCTGAG	GTGGGGGACC	TTGAGGTTTG	TTGCCTCCTT	240
GTGGGGGTGG	TCCTTGTGGC	TTTCTGAG	GAGGTGGGGG	ACCTTGAGGC	TGGTTGCCTC	300
CTTGTGGGGG	TGGTCCTTGT	GGCTTTCCTG	GAGGAGATGG	GGGACCTTGA	GGTTTGTTC	360
CTCCTTGTGG	GGGTGCTCCT	TGTGGATTTC	CTGCTATTAG	GGAGGGAGAT	TCTTCCTGGC	420
TGACATCTTC	ATTTAAGTTC	TGAGCTGAGC	TCAGGGCCAG	CAGGGCCACT	GACAGCAGAA	480
TCAACAGCAT	CTTGCAGGAG	GCTCTGGAGT	CACTTAGGCC	TCTTTGGCCG	AATTC	535

(2) INFORMATION FOR SEQ ID NO:493:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

GAATTCGGCC	AAAGAGGCCT	AGTCGGTAAT	CACAACAAAC	ACGGAGCAAT	CTCAATGCTG	60
TTTATCCGGA	GGACAGTCTG	CGGGGTCGTG	ACGATTCTTT	TCTTCTTGAA	GTTTTTCCTT	120
TTCTGAATC	TCATAATGAT	TCTTGCCAT	GATTCTGTCT	TTTCAATGAC	TGTGGCTTCT	180
ACTCGAACA	GATCCTTTC	GAGGAGTGGC	TTGCCAAGCA	GCGTGAAGTT	GTCTGCCCCA	240
ACCAGCAGGA	CCTTCTCCAG	TCGAATTCTC	TCTCCACACG	CAAGGTCTAG	TTCAATTCCA	300
ATTAAGATCA	GGTCTTCAGA	G				321

(2) INFORMATION FOR SEQ ID NO:494:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 361 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

GAATTCGGCC	AAAGAGGCCT	AACCTGCCTT	GTTTCTTGCT	CCTCTTTCCA	CGTTGGATAA	60
CAATTTTTTG	GTGTTTTGT	TTAAGTTGGT	GCTCTGAAGC	TTAATCTCAG	TACCCCTTAC	120
TCTGAATTGT	CAAATTTTGA	TAAAACGTGC	CATTTTCTTT	GGTAAGAGAA	AGCAGGTCTT	180
AATGTCTGCC	AGAACACAAT	TTATATGCCT	TATTGGCTTC	ATTAACTTT	TAGAAAACCT	240
TAGCATTGT	TACTTTTTTC	CATTGCATT	ACTTTCAAAT	GCACCTAATG	AATTCGTCAC	300
CCAGTCGCAA	CTTTCCCTT	CTCTGTCCCA	TTGCTTTCTC	CTTCCCCAA	CGCAGCTCGA	360
G						361

(2) INFORMATION FOR SEQ ID NO:495:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

```

GAATTCGGCC AAAGAGGCCT AAAGCGACCA AGATAAAAGT GGACAGAAGA ATAAGCGAGA      60
CTTTTATCC ATGAAACAGT CTCCTGCCCT CGCTCCGGAA GAGCGCTACC GCAAAGCCGG      120
GTCCCCAAG CCGGTCTTGA GAGCTGATGA CAATAACATG GGCAATGGCT GCTCTCAGAA      180
GCTGGCGACT GCTAACCTCC TCCGGTTCCT ATTGCTGGTC CTGATTCCAT GTATCTGTGC      240
TCTCGTTCTC TTGCTGGTGA TCCTGCTTTC CTATGTTGGA ACATTACAAA AGGTCTATTT      300
TAAATCAAAT GGGAGTGAAC CTTTGGTCAC TGATGGTGAA ATCCAAGGGT CCGATGTTAT      360
TCTTACAAAT ACAATTTATA ACCAGAGCAC TGTGGTGTCT ACTGCACATC CCGACCAACT      420
AGGCCTCTTT GGCCG                                     435

```

(2) INFORMATION FOR SEQ ID NO:496:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 122 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

```

GAATTCGGCC AAAGAGGCCT AGAAATATAT TTTCTAGTGA ATTCTTATTG GAAGCCAGGT      60
CTCTCCTCTC ATTAGATCAA AAGGGACTTA TGTACATACA ACAATTGAAA GTGTACTCG      120
AG                                     122

```

(2) INFORMATION FOR SEQ ID NO:497:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

```

GAATTCGGCC AAAGAGGCCT AAGAAAATCA GCCTGTCTGC TCTCTCCTTG GCTCAACAAG      60
GCCTCTAACA GTCTTCTGTC CTCTATTCTG CACACGGCAT ATTTGGGAAC GAGAAACAAA      120
AGTTTCCCA AATGAAGAGA ACTCACTTGT TTATTGTGGG GATTATTTT CTGTCCTCTT      180
GCAGGCAGAG AGAGGGGCTT AATTCCCCA CATATGATGG GAAGGACCGA GTGGTAAGTC      240
TTCCGAGAA GACCTCGAG                                     260

```

(2) INFORMATION FOR SEQ ID NO:498:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 48 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

```

GAAAGAGGCC TACCAACATG CCAGAGGCCG TACCCATATC CGCAGCAG      48

```

(2) INFORMATION FOR SEQ ID NO:499:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```
GAATTCGGCC TTCATGGCCT ACCCTGTCAA AATTTGCCT CCTCTTGATT TTCAATATAT   60
ATATATTTTT TTGTCTTACT CTGTTGCCCA GGCTAGAGTG CAGTGACGTG ACCTTGGCTC   120
ACTGCAACCT CTGCCTCCTG GGCTCAAGCA ATCCTCCCAC CTCAGCCTCC TCAGTAGCTG   180
GGACCACAGG CATATGCTAC AAAGCCCAGA TTATTTTTTT ATAGAAACAG GGTTCACCA   240
TGTTGCCAG GCTTGTCTCG AACCCAGAA CTCGAG   276
```

(2) INFORMATION FOR SEQ ID NO:500:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 301 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```
GAATTCGGCC TTCATGGCCT ACAAATGCCC ATCAAAGACT GGATAAAGAA AATGTAGTAT   60
ATATATATAT ACCATGGAAT ACTGTGCAGC CATAAAAAAG GAATGAGATC ATGTGTTTCA   120
CAGGGATGTG GATGAAGCTG GAAGCCATCA TCCCAGCAG ACTAACACAG GAACAGAAAA   180
CCAAACACTG CATGTTCTCA CTCATAAGTG GGAGCTGAAC AATGAGAACA GGTGGGCACA   240
GGGACGGGAA CAACACACAC CAGGGCCTGT TGTGTGGTGG GGGTGAGGGT TGGAACCTCGA   300
G   301
```

(2) INFORMATION FOR SEQ ID NO:501:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```
GCGAGGCAGG GAAACTCACT TCACGTCTCT TTCCTTGTAG AGCATCATGC TTATTTCTGG   60
CTCACTCACA TCTTTGTCTC GGGAGTTCTC TGCCGAGCCA TTGCCCCCTA CAGCAGAGAG   120
CACAGCTGGC TGCACTAGTG CTGAAGGAGC CAGCCCCAGA GCAGGGCATT TCCAGGGGCT   180
CTTGTCCTCAG AGCGGCAGGC GTTGTGTGCA GAGAACGCCC CTCCCACGCA GCACAGAGAA   240
CGCGGGGTGG GTGTGTGGCT CCGGGCCTGT GGGGCTTAGG CTGCCTGAAC CACGCGGAC   300
TGGCACCATG ACTCGGCATT CCTGGAAGTG CCTTACCAAG TTGTTGTTGT TGTTTGTTG   360
TTTTTTAAGA GACGGGCTTG CTCTATCATC CAGGCTCGAG   400
```

(2) INFORMATION FOR SEQ ID NO:502:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 286 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

GAGATAAACA AAATTGATTG CCCCATTCCTC TCACTTCCCC ATCTTGTCTT CCTAGACCCC	60
ACAGAGTTAA AACTTGGGAT TCCCCTGGCC CCCCAGAAC ACTTGTATAT TGTTTGTGTTG	120
AGGTTTCGTGC CGCAGTAACA GACACAGTAT TTAATTGCAC ATACAGATGT TTGCTGGGTA	180
TATTCAGTGT AAATTTTATT TAATCTGTTT TTTTGTGTTG TTGGGGGTTA TTTGGGGGGA	240
GGTTGGTTTT GTTTTAAAT ATAAAAAAA AAATCTGTCA CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

GGCCTCACCT TACCCAGGA CTCGCTATG ACACCGCCTC TGCCCTACA AGACACAGAT	60
CTCTCGTCAG CCTCAAAGCC TGTGGCTGCA GCCACGCCTG TGTCCAGCA GGCTGAAGAG	120
GGCCTCACCT TACCCAGGA CTCGCTATG ACAGCACCTC TGCTCTGCA AGACACAGGC	180
CCCACCTCAG GTCCAGAGCC TCTGGCTGTG GCCACCCCTC AACCTTGCA GGCAGAAGCA	240
GGCTGTGCCC CAGGGACAGA GCCTGTGGCC ATACTCGAG	279

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 306 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC	60
AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT	120
GTCCTTCACA CTAGCTACAT GATTTATAGT CTTGCTCCCC AATATGTTAT GTATGGAAGC	180
CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCTT	240
TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

```
GAATTCGGCC TTCATGGCCT AAGGAGAATG GCGTGCACCC GGGAGGCGGA GCTTGCACTG      60
AGCCCAACATC ACGCCACTGC ACTCCAGCCC GGGCGACTGA GCGAGACTCT CTCTCNAAAA      120
AAAAAAAAAA AAAGAAAAAG AAAAAGAAAA AGAAAAAGAA AAGAAAATAT ATANATACAC      180
ACAGAGAGTG AGAGAGAGAG AGAGAGAGAG ACCAGAAAAA GAGAGAAGGA GAAAGAGAGA      240
ATGCAAAAAC CAAGAGGANA GAATGATCCA CTCTCCAAC T AGAAAGGTAG CTCTCAATCT      300
GAAAAGTCAC TTGATTACTT TGTCTATTTT GCTTATCTGC TACATCAATG GTTCCCTCGA      360
G
```

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

```
GAATTCGGCC TTCATGGCCT AGGCCTTTTC TTTTAAAGG AATTCAAGCA GGATACGTTT      60
TTCTGTTGGG CATTGACTAG ATTGTTTGCA AAAGTTTCGC ATCAAAAACA ACAACAACAA      120
AAAACCAAAC AACTCTCCTT GATCTATACT TTGAGAATTG TTGATTTCCT TTTTATTTTC      180
TGACTTTTAA AAACAACCTT TTTTCCACT TTTTAAAAA ATGCACTACT GTGTGCTGAG      240
CGCTTTTCTG ATCCTGCATC TGGTCACGGT CGCGCTCAGC CTGTCTACCC GCAGCACACT      300
CGAG
```

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

```
GGGGCTGCGG GGATTGACCT CCTCACTTCT GGGTTGCCAC TCGAAGCTTG CTCCGGGCAA      60
CGACCCCTGCT GCTTCCCAGA GGGAAACTGT AGCCACAGAG CCAGGAGAGA AGCCAAAGCA      120
CCTGCTCCAC GTCCACATCA CCCCAGGCTT CTAGCCCCCA GGGGCTTCAT CAGTGCTTCA      180
GCGCTCTCTC CCATCCCCCA CTCCCATGT CCCTCGTGAT CCGAACTCCT AGGGCTCCGT      240
GTCCACAGG TCACCACTTC CGGCTGTCTC GAG
```

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

GAATTCGGCC TTCATGGCCT ACATCAATAA AATACATTCT ACACAGAATA CGCCAACCAT	60
ACACTACTCT TTTTGTATAA TAAAAAATGT ATTTACTGAG CCAGTTGTGG TGGCTCGCGC	120
CTATAATCCC AGCACCTTGG AAGGCCAATG GGAGTGGATC GGTGAGGCC AGGAGTTTGA	180
GACCGGCCTG GCCAACATGG TGAATGCCG TCTCTACTGA GAATGCAGAA ATGAGCCGGG	240
CACGGTGGCA CGCACCTGTA GTCCAGGTA CTCCGATTCC TCTCGAG	287

(2) INFORMATION FOR SEQ ID NO:509:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 248 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

AAGAGGCGAT GCGGCGATG GCATCTCTCG GCGCCCTGGC GCTGCTCCTG CTGTCCAGCC	60
TCTCCGCTG CTCAGCCGAG GCCTGCCTGG AGCCCCAGAT CACCCCTTCC TACTACACCA	120
CTTCTGACGC TGTCAATTCC ACTGAGACCG TCTTCATTGT GGAGATCTCC CTGACATGCA	180
AGAACAGGGT CCAGAACATG GCTCTCTATG CTGACGTCGG TGGAAAACAA TTCCCTTGTC	240
CACTCGAG	248

(2) INFORMATION FOR SEQ ID NO:510:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 397 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

GGCGATGATT AGGCCAGACC CTCCCCATCC TCGTGAGGGC CAGAAGCTGT TGCTACACTG	60
TGAGGGTCGC GGCAATCCAG TCCCCAGCA GTACCTATGG GAGAAGGAGG GCAGTGTGCC	120
ACCCCTGAAG ATGACCCAGG AGAGTGCCCT GATCTTCCCT TTCCTCAACA AGAGTGACAG	180
TGGCACCTAC GGCTGCACAG CCACCAGCAA CATGGGCAGC TACAAGGCCT ACTACACCCT	240
CAATGTTAAT GACCCAGTC CGGTGCCCTC CTCCTCCAGC ACCTACCAGC CCATCATCGG	300
TGGGATCGTG GCTTTCATTG TCTTCCTGCT GCTCATCATG CTCATCTTCC TCGGCCACTA	360
CTTGATCCGG CACAAAGGAA CCTACCCTAC ACTCGAG	397

(2) INFORMATION FOR SEQ ID NO:511:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

GCCTGCCTCC AGGCCTTTGC TCCCACTGTT GCCTCCACTT AGAATAACAT TCCACCCCAT	60
CTCTATAAAT ATCCTACAGA CAAATACTAC CTTCCCCCTA AGGCCAGTTC TAACCCTAAC	120
TGACAACAAA TCATCTCTAC ATGATCTTTT CTTCTGGGA ATGCCTGCAG CACTGTTTAA	180
TCCTGCCCCA CCACCATCCC CTCACCCAGC ACCCTCTCCC AGACCAGACA GGGTGGCTCA	240
TGCCTGCAAT CCCAGCACCT TGGGAGGCTG AGGCAGGAGG ATTGCTCGAG	290

(2) INFORMATION FOR SEQ ID NO:512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

GAATTCGGCC TTCATGGCCT ACTATGCCGT CATGATAGAG AAGATGATCC TGAGAGACCT	60
GTGCCGTTTC ATGTTTGCT ACGTCGTCTT CTGTTCGGG TTTCCACAG CGGTGGTGAC	120
GCTGATTGAA GACGGGAAGA ATGACTCCCT GCCGTCTGAG TCCACGTCG ACAGGTGGCG	180
GGGGCCTGCC TGCAGGCCCC CCGATAGCTC CTACAACAGC CTGTACTCCA CCTGCCTGGA	240
GCTGTTCAAG TTCACCATCG GCATGGGCGA CTTGGAGTTC ACTGAGAACC ATGAACTTCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

GAATTCGGCC TTCATGGCCT AGGAACCTGG ACCGCGGCGG CGCCGGGTTT CCCTCATGAT	60
CCCGGGCGGG CGGCGGCGGC GGCAGAGGCG GCGGGAGGAT GACCTCTTAC CGGGAGCGGA	120
GTGCCGACCT GGCCCGTTTC TACACTGTCA CCGAGCCCCA GCGACACCCG AGGGGCTACA	180
CAGTATATAA GGTACCGGCC CGGGTTGTTT CACGAAGAAA TCCAGAGGAT GTCCAGGAGG	240
GAGAATCCTG AACCAACCTA TCCATGAACA TACTCTCTGC CATTTTCTTA GTCCTTTTTC	300
CGGAAAAACT CGAG	314

(2) INFORMATION FOR SEQ ID NO:514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

GAATTCGGCC TTCATGGCCT ACGAACTTAA GAAAATGAGA CTGAGCAATC TCATGGTTCT	60
TGGACAGTTA GTCTATGGCC AATTGATGGA ACCAGTAAAT CGAGAGAACT TTACGCAGAC	120
CTTGCCCCAA ATGCCAATTC ATTCTCATGC ACAGCCCCCA GATGCCAGGG AAGAGGATAT	180

CATACTTGAA	GGTCAACAGA	GCCTGCCATC	CCAGGCTTCA	GATTGGAGCC	GATACTCAAG	240
CAGCTTACTG	GAATCCGTCT	CTGTTCTCTG	AACACTAAAT	GAGGCTGTTG	TAATGACTCC	300
ATTTTCATCG	GAAGTTCAAG	GAATTTTCAGA	ACAGACCCTC	CTGGAGCTGT	CCAAAGGAAA	360
GCCCTCCCCG	CATCCCAGAG	CCTGGTTTGT	GTCTCTTGAT	GGAAAGCCAG	TTGCACAAGT	420
GAGGCACTCC	TTTATAGACC	TGAAAAAGGG	CAAGAGAACC	CAGAGCAATG	ACACCACTCT	480
GGACTCTGGG	GTGGACATGA	ATGAGCTTCA	CTCAAGTAGA	AAGCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

GGAGATGAAA	GTTAAAAGTG	AAAACCTTAA	AGAGGAGCCT	CAGTCTTCTG	AAGAAGAATC	60
TATGTCTTCT	GTGGAAACCA	GGACACTAAT	AAAATCTGAG	CCTGTAAGTC	CAAAGAATGG	120
TGTTTTACCA	CAGGCTACTG	GAGACCAGAA	ATCTGGTGGA	AAATGTGAAA	CAGACAGACG	180
CATGGTTGCA	GCCAGAACAG	AACCCCTAAC	TCCAAACCCA	GCTCTAAGA	AACCAAGAGT	240
CCACAAAAGG	GGATCAGAAT	CTAGTTCTGA	TTCTGACTCA	GATTCTGAGA	GATCATCTTG	300
TTCTTCCAGA	TCATCTTCTT	CCTCATCATC	CTCTTCTTGT	CCCACTCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 500 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

GTCTACACCN	TTCCGAGTTG	GCTGCAGATT	TGTGGTGCGT	TCTGAGCCGT	CTGTCCTGCG	60
CCAAGATGCT	TCAAAGTATT	ATTAAAAACA	TATGGATCCC	CATGAAGCCC	TACTACACCA	120
AAGTTTACCA	GGAGATTGG	ATAGGAATGG	GGCTGATGGG	CTTCATCGTT	TATAAAATCC	180
GGGCTGCTGA	TAAAAGAAGT	AAGGCTTTGA	AAGCTTCAGC	GCCTGCTCCT	GGTCATCACT	240
AACCAGATTT	ACTTGGAGTA	CATGTGAAAG	AAAACGTCAG	TCTGCCTGTA	AATTTAGCA	300
AGCCGTGTTA	GATGGGGAGC	GTGGAACGTC	ACTGTACACT	TGTATAAGTA	CCGTTTACTT	360
CATGGCATGA	ATAAATGGAT	CTGTGAGATG	CACTGCTACC	TGGTACTGCT	TTCAGTGTGT	420
TCCCCCTCAG	CCCCTCCGGC	GTGTCAGGCA	TACTCTGAGT	AGATAATTTG	TCATGCAGCG	480
CATGCAATCA	GAATCTCGAG					500

(2) INFORMATION FOR SEQ ID NO:517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

```

GAATTCGGCC TTCATGGCCT AGATGCTCAA CACCTCCTCC TTGGTGGAGC AGCTGAACGA      60
GCAGTTTAAC TGGGTGTCCC GGCTGGCAAA CCTCACGCAA GGCGAACACC AGTACTATCT      120
GCGGGTCACC ACGGTGGCTT CCCACACTTC TGA CTGGAC GTTCCTTCG GTGTCACTGA      180
GGTGGTCGTG AAGCTCTTTG ACTCTGATCC CATCACTGTG ACGGTCCCTG TAGAAGTCTC      240
CAGGAAGAAC CCTAAATTTA TGGAGACCGT GGCGGAGAAA GCNCTGCAGG AATACCGCAA      300
AAAGCACCCG GAGGAGTGAG ATGTGGATGT TGCTTTTGCA CCTACGGGGG CATCTGAGTC      360
CAGTCCCCC CAAGATGAGC TGCAGCCCC CAGAGAGAGC TCTGCACGTC ACCAAGTAAC      420
TCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

```

GAATTCGGCC TTCATGGCCT AATCTTAAGG GACCTTTCCT TACTACAGAT TCAAATGCGA      60
GATCTTGAGG GTTACAGGGA AACGAGGTAT CAGTTACTTC AGCTTCGACC TGCGCAGAGA      120
GCATCATGGA TTGGTTATGC TATTGCTTAC CATTTATTAG AAGATTATGA AATGGCAGCA      180
AAGATTTTAG AAGAATTTAG GAAAACACAA CAGACATCCC CTGACAAGGT GGATTATGAA      240
TATAGTGAAC TACTCTTATA TCAGAATCAA GTTCTTCGGG AAGCAGGTCT CTATAGAGAA      300
GCTTTGGAAC ATCTTTGTAC CTATGAAAAG CAGATTTGTG ATAACTTGC TGTAGAAGAA      360
ACCAAAGGGG AACTTCTGTT GCAACTATGT CGTTTGGA

```

(2) INFORMATION FOR SEQ ID NO:519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

```

GAATTCGGCC TTCATGGCCT ACTTATCTTA ATCCAATGGG TGACATCTTC AACAAACCTG      60
TTCCAAATAA GGCTGCATTC TAAACACTAG GGATTAAGAC ATCAACATGT GAATTTTGGA      120
GGAATGTAGT TCTAACCATA ACAGCAGTGA ATGAGATGAC AGACTATTGC TCTCAAAAGA      180
TAGCCAGGTT TCTAGTTTCC TTAGGCATTT TCTGGAGGTT TGCGAGCAGT TCATTATTAT      240
CTTAAAAATA TTATCCAGAG CTGTGGTCTA TCAGCAGCTC ATTACCAGAC TGGCAGATAC      300
ATTTAATCAG CAAAAGAGTT GTTCCTGTGA TTAGCATCCT CCTGGTTTCC CAGCTCAAGA      360
GTTCTTCTGA GTAATAGTAA TCCTTCCCC ATGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:520:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

GCTGAAGTGG	TGACTTTTGA	GAGAGGACAC	AAAATTATCA	TCAGCTCCAG	TCGGAGAATC	60
CAGAAAGGAG	AAGAGGTAAG	AGTGTGAGAG	ATTGCATCTG	CCATGTTGTT	CAGATCCTGG	120
GCGAATAGTT	CCCTCCTCAC	ACAGGTCAC	TACTCACTTG	TTTCCCAATT	CTTTGTTGTG	180
ATAAAAACTC	TGTCCATAAT	AGGCCAGATG	TTCCACCCT	GCAGTATCTC	ACCCTTCAGG	240
CACTCCAGTT	CACCTTCCTC	CACATCCCTC	GAG			273

(2) INFORMATION FOR SEQ ID NO:521:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 323 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

GCTTTAAGAA	TTAACGAAAG	CAGTGTCAG	ACAGTAAGGA	TTCAAACCAT	TTGCCAAAAA	60
TGAGTCTAAG	TGCATTACT	CTCTCCTGG	CATTGATTGG	TGGTACCAGT	GGCCACTACT	120
ATGATTATGA	TTTTCCCTA	TCAATTATG	GGCAATCATC	ACCAAAGTGT	GCACCAGAAT	180
GTAACGCCCC	TGAAAGCTAC	CCAAGTGCCA	TGTACTGTGA	TGAGCTGAAA	TTGAAAAGTG	240
TACCAATGGT	GCCTCCTGGA	ATCAAGTATC	TTTACCTTAG	GAATAACCAG	ATTGACCATA	300
TTGATGAAAA	GGCCGCACTC	GAG				323

(2) INFORMATION FOR SEQ ID NO:522:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 274 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

GGAAAAAGAA	GAGAAAGCCA	AGGAAGACAA	GGGCAAACAA	AAGTTGAGGC	AGCTTCACAC	60
ACACAGATAC	GGAGAACCAG	AAGTGCCAGA	GTCAGCATTC	TGGAAGAAAA	TCATAGCATA	120
TCAACAGAAA	CTTCTAACT	ATTTTGCTCG	CAACTTTTAC	AACATGAGAA	TGTTAGCCTT	180
ATTTGTCGCA	TTTGCTATCA	ATTCATCTT	GCTCTTTTAT	AAGGTCTCCA	CTTCTTCTGT	240
GGTTGAAGGA	AAGGAGCTCC	CCACGAGGCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:523:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 273 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

GCCCCAGTCC	AGATCCAGGA	CTGAGATCCC	AGAACCATGA	ACCTGGCCAT	CAGCATCGCT	60
CTCCTGCTAA	CAGTCTTGCA	GGTCTCCCGA	GGGCAGAAGG	TGACCAGCCT	AACGGCCTGC	120
CTAGTGGACC	AGAGCCTTCG	TCTGGACTGC	CGCCATGAGA	ATACCAGCAG	TTACCCATC	180

CAGTACGAGT TCAGCCTGAC CCGTGAGACA AAGAAGCACG TGCTCTTTGG CACTGTGGGG 240
 GTGCCTGAGC ACACATACCG CTCCTCCTC GAG 273

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

GAATTCGGCC TTCATGGCCT ACTCTCCTAT AAAGCAGACG CCGCGCCGCG CTGCGACGCT 60
 GTAGTGGCTT CGTCTTCGGT TTTTCTCTTC CTTGCTAAC GCCTCCCGGC TCTCGTCAGC 120
 CTCGCCCGG CCGTCTCCTT AACACCGAAC ACCATGCCTT CAATTAAGTT GCAGAGTTCT 180
 GATGGAGAGA TATTGAAGT TGATGTGGAA ATTGCCAAAC AATCTGTGAC TATTAAGACC 240
 ATGTTGGAAG ATTTGGGAAT GGATGATGAA GGAGATGATG ACCCAGTTCC TATACCAAT 300
 GTGAATGCAG CAATATTAAA AAAGGTCATT CAGTGGTGCA CCCACCACAA GGATGACCTT 360
 CCTCTCCTG AAGATGATGA GAACAAAGAA AAGCGAACAG ATGATATCCC TGTTGGGAC 420
 CAAGAATTCC TGAAAGTTGA CTAAGGAACA CTCGAG 456

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

GAATTCGGCC TTCATGGCCT AATGGGACAA CTCCTCGCCC TCTACCTGTC CCCTCCCCCT 60
 TTGGTTGTAT GATTTTCTTC TTTTAAAGA ACCCTGGAA GCAGCGCCTC CTTCAGGGTT 120
 GGCTGGGAGC TCGGCCATC CACCTCTTGG GGTACCTGCC TCTCTCTCTC CTGTGGTGTC 180
 CCTTCCCTCT CCCATGTGCT CGGTGTTTCA TGGTGTATAT TTCTTCTCCC AGACATGGGG 240
 CACACGCCCC AAGGGACATG ATCCTCTCCT TAGTCTTAGC TCATGGGGCT CTTTATAAGG 300
 AGTTGGGGGG TAGAGGCAGG AAATGGGAAC CGAGCTGAAG CAGAGGCTGA GTTAGGGGGC 360
 TAGAGGACAG TGCTCCTGGC CACCCAGCCT CTGCTGAGAA CCATTCTTGG GATTAGAGCT 420
 GCCTTTCCCA GGGAAAAAGT GTCCGACTCG AG 452

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

GCGATTGAAT TCTAGACCAG ACTCGTCTCA GGCCAGTTGC AGCCTTCTCA GCCAAACGCC 60
 GACCAAGGAA AACTCACTAC CATGAGAATT GCAGTGATT GCTTTTGCTT CCTAGGCATC 120


```

ACCTGTGCCA TACCAGTTAA ACAGGCTGAT TCTGGAAGTT CTGAGGAAAA GCAGCTTTAC    180
AACAAATACC CAGATGCTGT GGCCACATGG CTAAACCCTG ACCCATCTCA GAAGCAGAAT    240
CTCCTAGCCC CACAGACCCT TCCAAGTAAG TCCAACGAAA GCCATGACCA CATGGATGAT    300
ATGGATGATG AAGATGATGA TGACCATGTG GACAGCCAGG ACTCCATTGA CTCGAATCGA    360
CTCGAG                                         366

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(2) INFORMATION FOR SEQ ID NO:527:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 408 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

```

GCCCCAGTCC AGATCCAGGA CTGAGATCCC AGAACCATGA ACCTGGCCAT CAGCATCGCT    60
CTCCTGCTAA CAGTCTTGCA GGTCTCCCGA GGCAGAAAGG TGACCAGCCT AACGGCCTGC    120
CTAGTGGACC AGAGCCTTCG TCTGGACTGC CGCCATGAGA ATACCAGCAG TTCACCCATC    180
CAGTACGAGT TCAGCCTGAC CCGTGAGACA AAGAAGCACG TGCTCTTTGG CACTGTGGGG    240
GTGCCTGAGC ACACATACCG CTCCCGAACC AACTTCACCA GCAAATACAA CATGAAGGTC    300
CTCTACTTAT CCGCCTTCAC TAGCAAGGAC GAGGGCACCT ACACGTGTGC ACTCCACCAC    360
TCTGGCCATT CCCACCCAT CTCCTCCCAG AACGTTACAG TGCTCGAG                     408

```

(2) INFORMATION FOR SEQ ID NO:528:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 403 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

```

GTAGGTCACA GCAGAAGCAG CCAAATGGA TCCCCAGTGC ACTATGGGAC TGAGTAACAT    60
TCTCTTTGTG ATGGCCTTCC TGCTCTCTGG TGCTGCTCCT CTGAAGATTC AAGCTTATTT    120
CAATGAGACT GCAGACCTGC CATGCCAATT TGCAAACCTCT CAAAACCAAA GCCTGAGTGA    180
GCTAGTAGTA TTTTGGCAGG ACCAGGAAAA CTTGGTTCTG AATGAGGTAT ACTTAGGCAA    240
AGAGAAATTT GACAGTGTTT ATTCCAAGTA TATGGGCCGC ACAAGTTTTG ATTCGGACAG    300
TTGGACCCTG AGACTTCACA ATCTTCAGAT CAAGGACAAG GGCTTGATAT AATGTATCAT    360
CCATCACAAA AAGCCACAG GAATGATTCT CATCCACCTC GAG                         403

```

(2) INFORMATION FOR SEQ ID NO:529:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 475 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

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GAATTCCTCT TCTTTACCCT CGTCCTGCCG GGCACCTTCC TTAGGTTTGG TTTTCATCTAC    60

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AGCTTCTATG TTCTCTTCAG CTTGGCTGCT CTCCCCAGTC TCCGTTGGAG GCTGGGCTGT      120
TGCTTTGGCA GCAGCATCCT CTGCGGCAGG GGTGGTGGCA GCAGCAGCAG TGACAGCAGC      180
AGGCACATCG GCTTGTTTAG GCTCCTCCTT GGCTGGGGCA TCTTCAGCCT TGGAGGACGG      240
CGAGTTATCA GTGGAAGCTT TAGTGGCACT TTCTGTCTCA GCTGAGCCGG CCTTCTCCTC      300
TGAGGATGCA GGAGCCTGGG GGGCTACCTG CTCTGTGGCA GCATCACCCCT CCCCCTTTT      360
CTCCTCGGAA GGAGTTTCTC CTGCTTTGCC GGGCTCATCA GGCTTGAGC CAGTGGCTGG      420
GGCTGCTTCG GCAGTAGTGG TGCCTTCTCC CTTCTTCTCC ACCCCATCGC TCGAG          475

```

(2) INFORMATION FOR SEQ ID NO:530:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

```

GTGCTGGCGG ACATGGACGT GGTGAATCAG CTGGTGGCTG GGGGTCAGTT CCGGGTGGTC      60
AAGGAGCCCC TCGGCTTTGT GAAGGTGCTG CAATGGGTCT TCGCCATCTT CGCCTTTGCC      120
ACATGCGGCA GCTACAGTGG GGAGCTCCAG CTGAGCGTGG ATTGTGCCAA CAAGACCGAG      180
AGTGACCTCA GCATCGAGGT CGAGTTCGAG TACCCCTTCA GGCTGCACCA AGTGACTTT      240
GATGCACCCA CCTGCCGAGG GGGCACCACC AAGGTCTTCT TAGTTGGGGA CTACTCCTCG      300
TCAGCCGAAT TCTTTGTCAC CGTGGCCGTG TTTGCCTTCC TCTACTCCAT GGGGGCTCTG      360
GCCACCTACA TCTTCCTGCA GAACAAGTAC CGAGAGAATA ACAAAGGGCC CATGCTGGAC      420
TTTCTGGCCA CGGCTGTGTT CGCCTTCATG TGGCTAGTTA GCTCATCGGC ATGGGCCAAG      480
GGGCTGTCTG ATGTGAAGAT GGCCACAGAC CCAGATGAAC TCGAG          525

```

(2) INFORMATION FOR SEQ ID NO:531:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

```

GCAAACAGAC AAGGCTTACA GGTAGTTCA GGATCTGCGC CTTATCAAGC AAATTGTTTT      60
GCCTATCCAA CCTGCGGTGC CAAACCCATA TACTCTCCTA TCCTCAATAC CTCCCTCCAC      120
AACCCCTCCA TAACCCATTA TTCGGTTCTG GATCTCAAAC ATGCTTTCTT TGCTATTCTT      180
TTGCATCCTT CATCCAGCC TCTCTTTGCT TTCACTGGG CTGGCCCTGA CACCCATCAG      240
CCTCAGCAAC TTACCTGGGC TGTACTGCCA CAAGCCTTCA CGGACAGCCC CCATTACTTC      300
AGTAGCCCTC GAG          313

```

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

```

GAGACTATCG CCTATACTTT ATTTGGGTAA ATGGTTTGGT TAAGGTTGTT TGGTGGTAGC      60
TGGTTGGGTT GCTGGGGCTC GGTGTTGTA GTCGCGATGT TCTTCTCCGA GGCCAGAGCC      120
AGGTCGCGGA CGTGGGAAGC CAGTCCCTCG GAACACAGGA AGTGGGTGGA AGTATTTAAA      180
GCATGTGATG AAGATCACAA AGGATATCTC AGCAGAGAGG ACTTTAAAC TGCTGTTGTA      240
ATGCTGTTTG GGTACAAGCC CTCCAAGATA GAAGTGGATT CTGTGATGTC TTCAATAAAT      300
CAAATACTT CTGGTATATT ACTCGAG                                         327

```

(2) INFORMATION FOR SEQ ID NO:533:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 347 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

```

GCCTGCCCC ACCTACAGG TCTGGGATGT ACCTTTCCAT CTGTGCTGC TTTCTTCTAT      60
GGGCCCCCTG CCTCACTCTC AAGAACCTCA ACTACTCCGT GCCGGAGGAG CAAGGGGCCG      120
GCACGGTGAT CGGAACATC GGCAGGGATG CTCGACTGCA GCCTGGGCTT CCGCTGCAG      180
AGCGCGGCGG CGGAGGGCGC AGCAAGTCGG GTAGCTACCG GGTGCTGGAG AACTCCGCAC      240
CGCACCTGCT GGACGTGGAC GCAGACAGCG GGCTCCTCTA CACCAAGCAG CGCATCGACC      300
GCGAGTCCCT GTGCCGCCAC AATGCCAAGT GCCAGCTGTC CCTCGAG                                         347

```

(2) INFORMATION FOR SEQ ID NO:534:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 506 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

```

GGTAGGACCG GCGAGGAATA GGAATCATGG CGGCTGCGCT GTTCGTGCTG CTGGGATTCG      60
CGCTGCTGGG CACCCACGGA GCCTCCGGGG CTGCCGGCAC ATTCTTCACT ACCGTAGAAG      120
ACCTTGGCTC CAAGATACTC CTCACCTGCT CTTGAATGA CAGCGCCACA GAGGTCACAG      180
GGCACCGCTG GCTGAAGGGG GCGTGGTGC TGAAGGAGGA CGCGTGCCC GGCCAGAAAA      240
CGGAGTCAA GGTGGACTCC GACGACAGT GGGGAGAGTA CTCCTGCGTC TTCCTCCCCG      300
AGCCCATGGG CACGGCCAAC ATCCAGCTCC ACGGGCCTCC CAGAGTGAAG GCTGTGAAGT      360
CGTCAGAACA CATCNACGAG GGGGAGACGG CCATGCTGGT CTGCAAGTCA GAGTCCGTGC      420
CACCTGTCAC TGAAGGGCC TGGTACAAGA TCACTGACTC TGAGGACAAG GCCCTCATGA      480
ACGGCTCCGA GAGCAGAGTT CTCGAG                                         506

```

(2) INFORMATION FOR SEQ ID NO:535:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 475 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

```

GAATTCCTCT TCTTACCCT CGTCCTGCCG GGCACCTTCC TTAGGTTTGG TTTCATCTAC      60
AGCTTCTATG TTCTCTTCAG CTTGGCTGCT CTCCCCAGTC TCCGTTGGAG GCTGGGCTGT      120
TGCTTTGGCA GCAGCATCCT CTGCGGCAGG GGTGGTGGCA GCAGCAGCAG TGACAGCAGC      180
AGGCACATCG GCTTGTTTAG GCTCCTCCTT GGCTGGGGCA TCTTCAGCCT TGGAGGACGG      240
CGAGTTATCA GTGGAAGCTT TAGTGGCACT TTCTGTCTCA GCTGAGCCGG CCTTCTCCTC      300
TGAGGATGCA GGAGCCTGGG GGGCTGCCCTG CTCTGTGGCA GCATCACCTT CCCCCTTCTT      360
CTCCTCGGAA GGAGTTTCTC CTGCTTTGCC GGGCTCATCA GGCTTGGAGC CAGTGGCTGG      420
GGCTGCTTCG GCAGTAGTGG TGCCTTCTCC CTCTTCTCC ACCCCATCGC TCGAG          475

```

(2) INFORMATION FOR SEQ ID NO:536:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

```

GAATTCGCCT TCATGGCCTA CAAGCTCTAG CCTAGACCTT TAGTGTGCCA TGCAGTCACA      60
GGTCTGAAAA GCAGCATCAT CCAAACCTTA CTTAATCTCT AAAATCTCAG CTGGTGGACA      120
GCTCATGATT AGTTCAGCCC ACTTCCTCCC CCTAGTTGA GTTTCAGCA GGACGCAGGA      180
GATAAGCACT TCCAAGCAAG TCTGATTTAT ATATCAAAC CGGTCTCCAT CCCAGGCCAG      240
CTGACCCCTCA GAGCCAGCAA TGCTCTGTGC TTCTCCCTG CGTCACGGCT TGGCAAGAGC      300
TGCTCTGCT GAGCAGTGTG TGTGATGGAG ACGGAGGCCG CTGAAGGCCG AGTGCTTGCA      360
GGCTTGTGAA CTGCCATCGA ACACAATCCA AACTCTGGAA ATGTCCTGA CCACCTAAGC      420
CCTCAACAAC GTAATGCCTG TATGTGCTNT TTNTCAGTAA ACTCCTTGCT CATGTCNATA      480
AAGTATCCCT GAACACTCGA G                                     501

```

(2) INFORMATION FOR SEQ ID NO:537:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

```

GCGGGCACCA TTTCCAGTAT GTACCAAACC AAAGCCGTCA TCATTGCAAT GATCATCACT      60
GCGGTGGTAT CCATTTCAGT CACCATCTTC TGCTTTCAGA CCAAGGTGGA CTTACCTCG      120
TGCACAGGCC TCTTCTGTGT CCTGGGAATT GTGCTCCTGG TGAAGGGAT TGTCACTAGC      180
ATTGTGCTCT ACTTCCAATA CGTTTACTGG CTCCACATGC TCTATGCTGC TCTGGGGGCC      240
ATTTGTTTCA CCCTGTTCTT GGCTTACGAC ACACAGCTGG TCCCGGGGAA CCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:538:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

GCTCCACCAG	CTACTGAGAA	AATGGCCTGT	AAAGATCCAG	AAAAACCCAT	GGAGGCCTGT	60
GCCTCAGCAC	ATGTGCAACC	CAAGCCTGCC	CCTGAAGCCA	GTAGCCTAGA	GGAGCCCCAT	120
AGCCCAGAAA	CAGGGGAGAA	GGTAGTAGCA	GGAGAGGTAA	ACCCACCCAA	TGGCCCTGTG	180
GGGGACCCAC	TGAGCCTCTT	GTTTGGGGAT	GTGACATCCC	TGAAAAGCTT	TGATTCATTG	240
ACAGGTTGTG	GTGACATAAT	AGCAGAACAA	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:539:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

GAATTCGGCC	TTCATGGCCT	AGCCAGACAA	CTTGACTGA	TCTTCTTTG	CTTGCCTAC	60
TAATCACACA	CACCCTCTCT	TCTAGCCTGT	GAAGACTTAA	CTGATTTTCT	ACGGATGAAG	120
GTTTCAGTGT	CCCAAGGCCC	CATACCGTAT	CTGATTTTAC	TTTATTTTGT	TTTGTTAAGC	180
CTAACAGCTT	CTGAGGAGCC	ACGTAGAGCT	CAAGAAGCAA	AAGCTACTGA	GAGTAGATGC	240
TATGTAAACT	GCACAAGACG	TCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:540:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GAATTCGGCC	TTCATGGCCT	ACAAAAGAT	GCTGGACAAG	GCGTTTGCG	AGCGGATCAT	60
CCATGACTAC	AAGGATATTT	TCAAACAAGC	AACTGAAGAC	AGGCTCACCA	GTGCCAAGGA	120
ACTGCCCTAT	TTTGAAGGTG	ATTTCTGGCC	CAATGTGTTA	GAAGAGAGCA	TTAAGGAACT	180
AGAACAAGAA	GAAGAGGAGA	GGAAAAGGA	AGAGAGCACT	GCAGCCAGTG	AAACCACTGA	240
GGGCAGTCAG	GGCGACAGCA	AGAATGCCNA	GAAGAAGAAC	NACNAGAAAA	CCAACAAGAA	300
CAAAAGCAGC	ATCAGCCGCG	CCAACAAGAA	GAAGCCAGC	ATGCCCAACG	TGTCCAATGA	360
CCTGTCCCAG	AAACTCGAG					379

(2) INFORMATION FOR SEQ ID NO:541:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

GAATTCGGCC TTCATGGCCT ACATAATTG AATCAACACA ACCACCCACA GCCTAATTAT	60
TAGCATCATC CCTCTACTAT TTTTAAACCA AATCAACAAC AACCTATTTA GCTGCTCCCC	120
AACCTTTTCC TCCGACCCCC TAACAACCCC CCTCCTAATA CTAACCTACCT GACTCCTACC	180
CCTCACAATC ATGGCAAGCC AACGCCACTT ATCCAGTGAA CCACTATCAC GAAAAAACT	240
CTACCTCTCT ATACTAATCT CCNNACAAAT CTCCTTAATT ATAACATTCA CAGCCACAGA	300
TCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:542:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

GGATGGCGCC GCGGAGGGTC AGGTCGTTTC TCGCGGGGCT CCCGGCGCTG CTACTGCTGC	60
TGCTCTTCTT CGGGCCCTGG CCCGCTGCGA GCCACGGCGG CAAGTACTCG CGGGAGAAGA	120
ACCAGCCCAA GCCGTCCCCG AACGCGAGT CCGGAGAGGA GTTCCGCATG GAGAAGTTGA	180
ACCAGCTGTG GGAGAAGGCC CAGCGACTGC ATCTTCCTCC CGTGAGGCTG GCCGAGCTCC	240
ACGCTGATCT GAAGATACAG GAGAGGGACG AACTCGCCTG GAAGAACTA AAGCTTGACG	300
GCTTGACGA AGATGGGGAG AAGGAAGCGA GACTCATACG CAACACACTC GAG	353

(2) INFORMATION FOR SEQ ID NO:543:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

GGATACCCCTA AAAAAACAAT CTATGTCAGA GGCTTCACTG GAGGTTACGT CACGTTATCG	60
TATTAATTTA GAAGATGAGA CACAGGATTT AAAGAAGAAA TTAGGTCAAA TCAGAAATCA	120
ATTGCAAGAA GCACAGGATC GACATACAGA AGCTGTGAGA TGTGCTGAGA AGATGCAAGA	180
TCACAAGCAA AAGCTTGAAA AAGATAATGC CAAGTTAAAA GTTACAGTCA AAAAGCAAAT	240
GGACAAAATT GAGGAGCTTC AGAAAAACCT GTTAAATGCA AATTTGTCTG AAGATGAAAA	300
GGAACCTCGAG	310

(2) INFORMATION FOR SEQ ID NO:544:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

GTTTGGATGA TTGGTGGCGT GTACGCAGCT GCTATGGCCT GGGCCATCAT CCCCCACTAT	60
GGGTGGAGTT TTCAGATGGG TTCTGCCTAC CAGTTCCACA GCTGGAGGGT CTTCGTCTCT	120

GTCTGCGCCT TTCCTTCTGT GTTGCCATT GGGGCTCTGA CCACGCAGCC TGAGAGCCCC	180
CGTTTCTTCC TAGAGAATGG AAAGCATGAT GAGGCCTGGA TGGTGCTGAA GCAGGTCCAT	240
GATACCAACA TGCGAGCCAA AGGACATCCT GAGCGACTCG AG	282

(2) INFORMATION FOR SEQ ID NO:545:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

GAATTCGGCC TTCATGGCCT AGAACTTTGT ACACCATGGA ATGTTCTACT TATTATTTTG	60
TGCTACAATA TGTGCTGTTT CTTTGTTTG AATTGCAGAT TGTCTACTAT GAAGCAGGGA	120
TTATCTATG CTGTGCTCCTG GGGCTGCTGT TTATTATTCT GATGCCTCTG GTGGGGTATT	180
TCTTTTGTAT GTGTCGTTGC TGTAACAAAT GTGTTGGAGA AATGCACCAG CGACAGAAGG	240
AAAATGGGCC CTTCTGAGG AAATGCTTTG CAATCTCCCT GTTGGTGATT TGTATAATAA	300
TAAGCATTGG CATCTTCTAT GGTTTGTGG CAAATCACCA GGTAAGAACC CGGATCCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

TCGAGGGACA TGAGGCTGAG CTGGTTCCAG GTCCTGACAG TACTGTCCAT CTGCCTGAGC	60
GCCGTGGCCA CGGCCACGGG GGCCGAGGGC AAAAGGAAGC TGCAGATCGG GGTCAGAAG	120
CGGGTGGACC ACTGTCCCAT CAAATCGCGC AAAGGGGATG TCCTGCACAT GCACACACG	180
GGGAAGCTGG AAGATGGGAC AGAGTTTGAC AGCAGCCTGC CCCAGAACCA GCCCTTTGTC	240
TTCTCCCTTG GCACAGGCCA GGTCAACAAG GGCTGGGACC AGGGGCTGCT GGGGATGTGT	300
GAGGGGGACC TCGAG	315

(2) INFORMATION FOR SEQ ID NO:547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

GAATTTTAAT TAAGAATTCG GCCTTCATGG CCTAATCGAG GAGAATGGAG ACCAAACCTG	60
TGATAACCTG TCTCAAAACC CTCCTCATCA TCTACTCCTT CGTCTTCTGG ATCACTGGGG	120
TGATCCTGCT GGCTGTTGGA GTCTGGGGCA AACTTACTCT GGGCACCTAT ATCTCCCTTA	180
TGCGCGAGAA CTCACAAAT GCTCCCTATG TGCTCATCGG AACTGGCACC ACTATTGTTG	240

TCTTTGGCCT GTTTGGATGC TTTGCTACAT GTCGTGGTAG CCCATGGATG CTGAAACTGT	300
ATGCCATGTT TCTGTCCCTG GTGTTCCCTGG CTGAGCTCGT AGCTGGCATT TCAGGGTTTG	360
TGTTTCGTCA TGAGATCAAG GACACCTTCC TGAGGACTTA CACGGACGCT ATGCAGACTT	420
ACAATGGCAA TGATGAGAGA ATGCTCGAG	449

(2) INFORMATION FOR SEQ ID NO:548:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

GGGCTTTAAA GGCAGACATT GATGCTACAT TATATGAACA AGTCATCCTG GAAAAAGAAA	60
TGGGAACCTTA TTTGGGCACC TTTGATGATT ACTTGGAGTT ATTCCTGCAG TTTGGTTATG	120
TGAGCCTTTT CTCCTGTGTT TACCCATTAG CAGCTGCCTT TGCTGTGTTA AATAACTTCA	180
CTGAAGTAAA TTCAGATGCC TTAAAAATGT GCAGGGTCTT CAAACGTCCA TTCTCAGAAC	240
CTTCAGCCAA TATTGGTGTG TGGCAGTTGG CTTTGTGAAAC GATGAGTGTT ATATCTGTGG	300
TCACTAACTG TGCCTGATT GGAATGTCAC CACAAGTGAA TGCACTCTTT CCAGAATCAA	360
AGGCAGACCT CGAG	374

(2) INFORMATION FOR SEQ ID NO:549:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

GTACAATCTG AATCCAGGTC TGACAGCTGG CCATACAAAG TCATACTTTC CCCACATCCC	60
TCCTCTTTGA TAGGCATGTT CATCTAGAGC AATAGCCTCG AAATAGACTG AACACCGTGG	120
CCCATAGCTT AACTCCGTT CACCTCTATT TCAAAGTAAA CTTGGGCTGG GATTACAGGC	180
ATGAGTATGT TTTCAATTGT ACATAAAGAC TTTATACAAA TGCTCTTCCT AATATTTGCT	240
ACTTATTTTT GCATTAGTTC AAATTCTTTG TCCTGTCATC CCAAACTCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:550:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

GAATTCGGCC TTCATGGCCT AACTGACAG GGAACCCCC GAACCATCAT CGTGCCACCC	60
CTGAAAACCC AGGCCAGCGA AGTATTGGTG GAGTGTGATA GCCTGGTGCC AGTCAACACC	120
AGTCACCACT CGTCCTCCTA CAAGTCCAAG TCCTCCAGCA ACGTGACCTC CACCAGCGGT	180
CACTCTTCAG GGAGCTCATC TGGAGCCATC ACCTACCGGC AGCAGCGGCC GGGCCCCCAC	240

TTCCAGCAGC AGCAGCCACT CAATCTCAGC CAGGCTCAGC AGCACATCAC CACGGCCGTC 300
GAG 303

(2) INFORMATION FOR SEQ ID NO:551:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 375 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

GCCACAAGCC TGTCAGCAAG TGGGGCTACT TGGGTCCTCG GGCCTCAATC CACTCCTGGC 60
 CAGAGACAAC TTCCTCTCCC ATGGGAAAGG CTAACGCATG CCCATAAATT AAGACATTG 120
 CTCTCCCTCC AAGCCCTGGA AACCTGGGAC TCTCTAACAT CTACCTCTGT TTTCTTTGGC 180
 TGCATTCAAC TTTCCTGCAA TTAGTCAGGC CCTGGGGCAG CAGTTAGACG ACAGATGAGT 240
 CAGAGGATTG CAGAATCTAA TCCAGAAGGA AGAGTTTATC CAAATGTTGG TGGCCTTTCT 300
 CTTTGGCGC ATTCTCTTCT GGTTCGTCT TTTCTCAGGA GTCCTCTGAG CTTCCATGTA 360
 CCGGGCCCCC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:552:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 390 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GCAAGGGCAG GCGGGTCCCC CAGTCCCGCC ATTACGGGTT GTCAGACCGT CTGCGTGTGG 60
 CAGGGCTCCC AAGGGCAGGC GGGTCCCCCA GTCCCGCCAT TACGGGTTGT CAGACCGTCT 120
 GCGTGTGGCA TTTTGTGGCT TATAAGCTTC ACCCACTCAC CCCCACCCA CACCCACAT 180
 CCCCCTGCCG GCAGCCCCTC AACCTAAGAA GGCCAGAGCA TATTTATTTT CGGAGGGAGC 240
 AGATTACTTC TCCCAGAGAA AGGAAAATCT TGGAAAAGAT TAAAAACAC AAATCTAAGC 300
 CTTGACGGTT TTTTGTCCC TTTGACCCC CTCCCATTT TTTCAGNATT TATTCCATG 360
 GCTTTTTTTT TTCTTGTCG TGTCTCGAG 390

(2) INFORMATION FOR SEQ ID NO:553:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 620 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

GAATTGCGCC AAAGAGGCCT AAGCAGGCGC GAGGCGGCGG CAGCGAGCCG GGTCCACCA 60
 TGGCCGCGAA TTATTCCAGT ACCAGTACCC GGAGAGAACA TGTCAAAGTT AAAACCAGCT 120
 CCCAGCCAGG CTTCTTGAA CGGCTGAGCG AGACCTCGGG TGGGATGTTT GTGGGGCTCA 180
 TGGCCTTCCT GCTCTCCTC TACCTAATT TCACCAATGA GGGCCGCGCA TTGAAGACGG 240

CAACCTCATT	GGCTGAGGGG	CTCTCGCTTG	TGGTGTCTCC	CGACAGCATC	CACAGTGTGG	300
CTCCCGAGAA	TGAAGGAAGC	TGGTGACAT	CATTGGCGCC	TTACGGACAT	CCAAGCTTTT	360
GTCTGATCCA	AACTATGGGG	TCCATCTTCC	GGCTGTGAAA	CTGCGGAGGC	ACGTGGAGAT	420
GTACCAATGG	GTAAGAACTG	AGGAGTCCAG	GGAGTACACC	GAGGATGGGC	AGGTGAAGAA	480
GGAGACGAGG	TATTCCTACA	ACACTGAATG	GAGGTCAGAA	ATCATCAACA	GCAAAAACCT	540
CGACCGAGAG	ATTGGACACA	AAAACCCAG	TGCCATGGCA	GTGGAGTCAT	TCATGGCAAC	600
AGCCCCCTTT	GTTCTCGAG					620

(2) INFORMATION FOR SEQ ID NO:554:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 600 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

GAATTCGGCC	AAAGAGGCCT	AGGACTTGTT	TCGGAAGGAG	CTGACTGGCC	AATCACAATT	60
GCGAAGATGA	AGGCTCTGTG	GGCCGTGCTG	TTGGTCACAT	TGCTGACAGG	ATGCCCTAGCC	120
GAGGGAGAGC	CGGAGGTGAC	AGATCAGCTC	GAGTGGCAAA	GCAACCAACC	CTGGGAGCAG	180
GCCCTGAACC	GCTTCTGGGA	TTACCTGCGC	TGGGTGCAGA	CGCTGTCTGA	CCAGGTCCAG	240
GAAGAGCTGC	AGAGCTCCCA	AGTCACACAA	GAAGTACCGG	CACTGATGGA	GGACACTATG	300
ACGGAAGTAA	AGGCTTACAA	AAAGGAGCTG	GAGGAACAGC	TGGGTCCAGT	GGCGGAGGAG	360
ACACGGGCCA	GGCTGGGCAA	AGAGGTGCAG	GCGGCACAGG	CCCGACTCGG	AGCCGACATG	420
GAGGATCTAC	GCAACCGACT	CGGGCAGTAC	CGCAACGAGG	TGCACACCAT	GCTGGGCCAG	480
AGCACAGAGG	AGATACGGGC	GCGGCTCTCC	ACACACCTGC	GCAAGATGCG	CAAGCGCTTG	540
ATGCGGGATG	CCGAGGATCT	GCAGAAGCGC	CTAGCTGTGT	ACAAGGCAGG	GGCAGTCGAG	600

(2) INFORMATION FOR SEQ ID NO:555:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

GAATTCGGCC	TTCATGGCCT	AGTATTTCTT	TATCACAGAT	TTTGGGAGCA	ACAGTGTTTT	60
CCCATCTGGA	GGAGGCTGAG	TTAATTCTGT	GGAACACCCA	TTGGTTGGA	AATAAAAACA	120
CAGCATGGAT	TTAATTCTATG	CCACTTATTT	ATTTTTATTA	GGACTTGAGC	TTCTTTGTAT	180
TTTTTTTGCT	TTGCTTCCAC	TCAAAACCAG	ATTTGGTGGT	TGCTGTGTAA	ACAGTGAAAT	240
ACAACACAGG	CCAGGACTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:556:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 470 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC AAGAGGCCTA GTATTCTTTC GTTCTCTCT AAAAGAAGAA AAATATAATT      60
TAGAAATACA TTGCGTATTT TCTAAAACAA TAAATTTATA GTGTTAATAT TCATAGGGTC      120
AATCAAAATG AAGCTTCTCC TTTGGGCTTG CATTGTATGT GTTGCTTTTG CAAGGAAGAG      180
ACGGTTCCCC TTCATTGGTG AGGATGACAA TGACGATGGT CACCACTTC ATCCATCTCT      240
GAATATTCCT TATGGCATA GGAATTTACC ACCTCCTCTT TATTATCGCC CAGTGAATAC      300
AGTCCCCAGT TACCCTGGGA ATACTTACAC TGACACAGGG TTACCTTCGT ATCCCTGGAT      360
TCTAACTTCT CCTGGATTCC CCTATGTCTA TCACATCCGT GGTTTTCCCT TAGCTACTCA      420
GTTGAATGTT CCTCCTCTCC CTCCTAGGGG TTTCCCGTTT GTCCCTCGAG      470

```

(2) INFORMATION FOR SEQ ID NO:557:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

```

GAATTCGGCC AAAGAGGCCT ATGCAGATTC TGTGGTTATA CTCCTCCTC ATCCCAAAGA      60
ATGAAATTTA CCACTCTCCT CTTCTTGGCA GCTGTAGCAG GGGCCCTGGT CTATGCTGAA      120
GATGCCTCCT CTGACTCGAC GGGTGCTGAT CCTGCCCAGG AAGCTGGGAC CTCTAAGCCT      180
AATGAAGAGA TCTCAGGTCC AGCAGAACCA GCTTCACCCC CAGAGACAAC CACAACAGCC      240
CAGGAGAGTT CGGCGGCAGC AGTTCAGGGG ACAGCCAAGG TCACGTCAAG CAGGCAGGAA      300
CTAAACCCCC TGAAATCCAT AGTGGAGAAA AGTATCTTAC TAACAGAACA AGCCCTTGCA      360
AAAGCAGGAA AAGGAATGCA CGGAGGCGTG CCAGGTGGAA AACAAATCAT CGAAATGGA      420
AGTTCCTCG AG                                     432

```

(2) INFORMATION FOR SEQ ID NO:558:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

```

GAATTCGGCC AAAGAGGCCT AAAAAGTATA TACATTTTAG TACTGCTTTG ATTTTGTTTA      60
CATACTGAAA AATGTATCTG AAAATGAGTT ATTTTGGACT CGAG                          104

```

(2) INFORMATION FOR SEQ ID NO:559:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

```

GAATTCGGCC AAAGAGGCCT ATTCACTTCA GCTTCACTGA CTTCTGGATT CTCCTCTTGA      60

```

GTAAAAGGAC TCAGCCAACT ATGAAGTTTT TTGTTTTTGC TTTAATCTTG GCTCTCATGC	120
TTTCCATGAC TGGAGCTGAT TCACATGCAA AGAGACATCA TGGGTATAAA AGAAAATTCC	180
ATGAAAAGCA ACATGATCTC GAG	203

(2) INFORMATION FOR SEQ ID NO:560:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 484 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

GAATTCGGCC ACAGAGGCCT AGCCAGTCT CGGGTATGTC TTTATCAGCA GCATGAAAAT	60
GGACTAATAC AGTTGCTATG ATTATTAGTT TTTTGCTACT GAGTTGTAGG AGTATCTGAT	120
ATATATTTTG GTAACATAATC CCTATAAAA TATATTGTTT CCAAATATTT TTTCCCCATT	180
CCATAGGCTG CCTTTTCATT CTGTTGTTTC CTTTGCTTCA GGTAAGGGAT TCTGAAACAA	240
CTATTTGGGC AGCAGAACAG CTTCTTTTGT TTGCTTTCTC ATTGTCTACT GTGTTCTGCA	300
TAAATAAGGT TATGAATTAG CTGTTGTTCA TATGGGTGAA AGATTGTCAT CTGTGGACGC	360
TTAGATAGCA CATATGGTAA ACCATAGAAC TTCACCATTT ATAACCTTTG AACAACTGAT	420
ACACTTAGAA AAGCAGTTTT TGGCTGGGCG CGGTGGCTCA TGCCTGTAAT CCCTAGGCCT	480
CGAG	484

(2) INFORMATION FOR SEQ ID NO:561:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 176 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCCT CGAGCTGACA ACTATGAAGT	60
TTTTTGTTTT TGCTTTAATC TTGGCTCTCA TGCTTTCCAT GACTGGAGCT GATTACATG	120
CAAAGAGACA TCATGGGTAT AAAAGAAAAT TCCATGAAAA GCATCAAGGA CTCGAG	176

(2) INFORMATION FOR SEQ ID NO:562:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 475 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

GAATTCGGCC AAAGGGCCTA ATTTTATTAA TAACATTTTA AAAACAACAA TTATGAAAAA	60
GCAATTCCGT TTACCGCTGA TGCTTGCGTC AGCCCTCGCC TTCTCTGCTT GTAGCTCTGA	120
TGATGTGGCC GAGAATGGCC CAAAGGACAT CGCAGCTCTT ACAGATGGTG GTTACTTGAA	180
GATGTCTATC AATCTTCCTT CCCGTGCTGC TAATGGTGGC TTCAGAGCTA CGGAACAAGA	240
CGGTTATGTT AACTTGGAAG ATGGATTGGC AAAAGAGTAC AATGTAAAGG ATGCTATCCT	300

CGTCCTTTTC CAAGGTGATA ATGAAGCAGA TGCCAAGTTC CATTCTGCAT ATGAACTTAC	360
TACATCAATG CAGAAGGATG GCTCTACGCA AATCACTTCC ACAACGAAAC TTGTTAAGAA	420
TGTGAATATT GGTGGTCAGG GAAATCCTCT TAAACCTGCT GATGTTAAGC TCGAG	475

(2) INFORMATION FOR SEQ ID NO:563:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

GAATTCGGCC AAAGAGGCCT ACAATTATGG GGCTTATGGG GAACATGCTC ATTGTGTTTT	60
ACCAATCAGG ACATGGAAC TAAACAATAT TTGTGACTT ATAGTGAAAC CTGGCTAATT	120
AGGACTCTTA ACCAGCACTC TTAATTAAC TACTTATTTT TCTCTGTGTC CACCCCTCTT	180
AAAGAAAAAG AAGCGAAACT CGAG	204

(2) INFORMATION FOR SEQ ID NO:564:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

GAATTCGGCC AAAGAGGCCT ATAGGCCTCT TTGGCCGTAG GCCTCTTTGG CCGATTGAAT	60
TCTAGACGCG GCTCGAGGCA GGTCTAGGCC TCTTTGGCCG AA	102

(2) INFORMATION FOR SEQ ID NO:565:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

GAATTCGGCC AAAGAGGCCT ACTCAATTGT TCCTTTCTTC CATCACCACC CTTTGAAGGT	60
CTCTTTGCCT ACTTGTAGAT TTAGGGGGAC ATAACATTGA GACTGAGCAG TTTCTTGAAC	120
CTCTCCTCTC AGCAGCCACC AGCCTGGCTT TCGCAGACCA CTGGAAAGTA TCCCAGCTCA	180
TTAGCTTTTG GAATGACGGG AAGCCTTTTG ATGTTNGACG TCTTAATCTC AACTCTTCAA	240
CTTAGCTCAT TCTGGAGCAG TCACGCGATG ACAGATGAGC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:566:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

GATAACTTGA GATCAAATCA GTCATATTTG ACTCTTCTCT TTTTCACTCC TTTTATATCT	60
GATCAGTCAG CAGTTTTTTG AAACCCTGTT CGAAGCAGTT CTCAACACTT GTGCACCCAT	120
TCTTTCTCCT ACACCACTCA ATCTAGACCC TCACATGTGG CTGTCCTGCT TTCCTTCTCT	180
CCTACTTCTA AGCTATTCTG TGGAGAGATG TCAAAGTAAT CTTCACAAAA AATCTGATTG	240
CATCACTTCA CATCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:567:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 374 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

GGGCTTTAAA GGCAGACATT GATGCTACAT TATATGAACA AGTCATCCTG GAAAAAGAAA	60
TGGGAACTTA TTTGGGCACC TTTGATGATT ACTTGGAGTT ATTCCTGCAG TTTGGTTATG	120
TGAGCCTTTT CTCCTGTGTT TACCCATTAG CAGCTGCCTT TGCTGTGTTA AATAACTTCA	180
CTGAAGTAAA TTCAGATGCC TTA AAAATGT GCAGGGTCTT CAAACGTCCA TTCTCAGAAC	240
CTTCAGCCAA TATTGGTGTG TGGCAGTTGG CTTTGGAAAC GATGAGTGTT ATATCTGTGG	300
TCACTAACTG TGCCTGATT GGAATGTCAC CACAAGTGAA TGCAGTCTTT CCAGAATCAA	360
AGGCAGACCT CGAG	374

(2) INFORMATION FOR SEQ ID NO:568:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GAATTCGGCC TTCATGGCCT AGATAAGTAA ATAGACTTAC AGAGGGAAAG TAACTTGGCT	60
AAGGTGAACT TGAACCAAGA TGAAGTACTC CAGAGCTTCC ATTTTCTTTT TTCTTTCTTT	120
TTTTTTTTTT NGGAGACAGA GTCTCACTCT GTCGCCCAGG CTGGAGTGCA ACGGCGCGGT	180
CTCCACTCAC TGCAGCCTCC AGCTCCTGGG CTCAAGTGAT CCTCCACCT CAGCACCCCC	240
ACGTCTCGAG	250

(2) INFORMATION FOR SEQ ID NO:569:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 367 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

```
GAATTCGGCC TTCATGGCCT ACAGGGAGGG AGGGGTTCTG AGAGCCTCAG ACCACAGGGC    60
CTGAGGCCCA CAGTGGCCCA GAGTCCATCT GGCAGCCCCT GCTCTGCTGG CCCAGGGGGC    120
TCTCCCCAGG GTGGAGTAGG CAGGGGAGGG TCGCTGGTCC CCAGTCCCAG CTTTCGAGAG    180
GTGGGGCCAG ACAGCAGGGC ACCCGTACCC GAGACCACAG TGCTCCCCAA GGCCAGCTCT    240
CTCCCCAGTG AGGTCACTCC TACCTCCGGG GCCATTTGGG GCGGGGGATC CTGTAGATCT    300
CTGACTCTGC GGCGCCTTAT CTTGATGGCC TGCNCAAGA AGGGAGGGCG CTGCCCACTT    360
CCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:570:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

```
TTTTGACTGA CTCTTTAAAT TAGTACAATT TTTCTACTTG TCATATAACT CCTGGAACAA    60
TAGTACGGGA AGCCGTGATC CTTTCCCTG ACTCATGATT TTAGTCTTTT TCCAAATCGC    120
TGTTTTTTTT TGGTTTTTTT TTTTTTGCT GCTCCAACGA CCAGCATGTG TTGGAGCAGA    180
TCTCCATGGT AAGCCAAAAG TGGACTTGTC AGCCTATAAC TACTCTGCAG CTGCCACTAA    240
CTCTACAGGC ACAGAGCTCG AG
```

(2) INFORMATION FOR SEQ ID NO:571:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

```
CAGAACTCT TGGACTCAA AGAGAAAGAA AAAAGTCAAG CCAAGGAAAG CACAAGAGGT    60
AAGACAGGCC TAGTGATCTC AGCAGGCAGA ATTTATGGAC ATATTTTGCA GGCAAGTGGT    120
TCTCAATCAG GGGTGATTTT TGGCTTGTA GGACATTAG CAATATCTGG ACACATTTT    180
TGGTTGTCGT AAGTGGATGG GGGTTGCTGC TATCATCCTA CAATGCATAG GTGCATTAGT    240
CTGTTTTCAT GCTGCTGATA AAGACATACC GGAGACTGGG CAATTTGCAA ATGAGAGATG    300
GCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:572:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 578 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

GAATTCGGCC	TTCATGCCTA	CAGCCATATT	AAAACTAAGT	AAACTCGTCC	CTGGGAACTA	60
CACTTTCAGC	TTGACTGTAG	TAGACTCTGA	TGGAGCTACC	AACTCTACTA	CTGCAAACCT	120
GACAGTGAAC	AAAGCTGTGG	ATTACCCCCC	TGTGGCCAAC	GCAGGCCCCA	ACCAAGTGAT	180
CACCCTGCCC	CAAACTCCA	TCACCTCTT	TGGGAACCAG	AGCACTGATG	ATCATGGCAT	240
CACCAGCTAT	GAGTGGTCAC	TCAGCCCAAG	CAGCAAAGGG	AAAGTGGTGG	AGATGCAGGN	300
TGTTAGAACA	CCAACCTTAC	AGCTCTCTGC	GATGCAAGAA	GGAGACTACA	CTTACCAGCT	360
CACAGTGACT	GACACAATAG	GACAGCAGGC	CACTGCTCAA	GTGACTGTTA	TTGTGCAACC	420
TGAAAACAAT	AAGCCTCATC	AGGCAGATGC	AGGCCCAGAT	AAAGAGCTGA	CCCTTCCTGT	480
GGATAGCACA	ACCCTGGATG	GCAGCAAGAG	CTCAGATGAT	CAGAAAATTA	TCTCATATCT	540
CTGGGAAAAA	CACAGGGACC	TGATGGGTGC	AGCTCGAG			578

(2) INFORMATION FOR SEQ ID NO:573:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 623 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

GAATTCGGCC	TTCATGGCCT	AACTTTGTGT	GATCAGAGTT	TATGGGTTGG	GCTGCCCCAG	60
GCTTGGATAA	CTTAAAGGCT	TGATGAGGTC	ATCAATTTAT	GCTTGGCTAC	CCATGGCACA	120
GAAGCATAGC	CCCACTGTGA	TGGCTGGGGT	GGCTCCGGGC	ATCCTGGGCA	GTCAGGAGGA	180
AACTCCATGA	AGGAAGGAGC	TAACCTTTCT	GGGGGTACCC	CTATCCCAGC	ACAGACTTCC	240
TCATCTCATT	GGTCAGAACT	GGGTCACATG	AACATGCCTC	AGCCTATCAC	AGGCACAGGG	300
AATGAGACCA	TCATGGACCA	ATCAGGATTC	ACCACTCAAG	GTGGGGCCTG	CCATCCGGAT	360
GGATGCTCTC	CGCCACAGGG	AGGTGGGGGA	CCCAGAAGCT	GTGGGCAATG	GCCATGTGCA	420
CAGTAGGACT	GAGGCACTCA	GTCCCGTAGC	TGACCTACCT	GGGACAGGCC	TGGAGGCTGA	480
CTTAGGTGTG	AGGGGCAGAG	AGATTACTGT	GCACAGACCG	CTGTGTGACC	CCAGATCTAG	540
GTGGGATCCC	GGTGTGCCCC	ATCTGCCTGG	CTTACCCCAA	CCCCTCTGGA	ACCTGAACCA	600
TTGAATTCTA	GACCTGCCTC	GAG				623

(2) INFORMATION FOR SEQ ID NO:574:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

GAATTCGGCC	TTCATGGCCT	ACTCCAGAAT	GAAGATCTTC	TTGCCAGTGC	TGCTGGCTGC	60
CCTTCTGGGT	GTGGAGCGAG	CCAGCTCGCT	GATGTGCTTC	TCCTGCTTGA	ACCAGAAGAG	120
CAATCTGTAC	TGCCTGAAGC	CGACCATCTG	CTCCGACCAG	GACAACTACT	GCGTGACTGT	180
GTCTGCTAGT	GCCGGCATTG	GGAATCTCGT	GACATTTGGC	CACAGCCTGA	GCAAGACCTG	240
TTCCCGGCC	TGCCCCATCC	CAGAAGGCCT	GCTCGAG			277

(2) INFORMATION FOR SEQ ID NO:575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

```
GAATTCGGCC TTCATGGCCT AAGCTTTTGC TTTTTTAATA ACTTGTATAG CTAAAAACTT    60
GACGGTGAAA AGCTCTCAGA TCAAAGCTGA TCCTTCTGTC AGTAATGATT CTAAAAATAA    120
GCAAGATTTT AATGGGGAAT ATATTTTATT TCATTCTTAT CTCAAACCTA GGTACTGTGG    180
TCGTTTTGAG TTCATTTTGA GGCATTTTCA ATGTGCCTCA GGCCACATCC AACCTCTCCC    240
CAGAACTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:576:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 261 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

```
GAATTCGGCC TTCATGGCCT ACAGTCTAAG ACATTTCTTA TTCTGCCTTC TTGTCTTCCT    60
CCCTCTCTTC CACATTGGTC AGACTTACAT CTGGACAGC TCTCCAGCC ATCTTCTACT    120
GCCTCCCTAT TTTCCCTCC CAGACTTTTC CCCGCAAAC ATCTGTTGCA GGTGGTATTA    180
ATTTCCTATC ACGGCTGTGA CAAATTACCA CAACTCAGT GGCTTAAAC AATGCACATT    240
TATTATCTGA CAGTTCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:577:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 216 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```
GAATTCGGCT TCATGGCCTA GCAAGACTCC ATCTCAAAAA AAGAAAGAAA GAAAAAGAA    60
AGTACAAGTT TATAAAGTAT TATAGTGAAA AATTGCGATT CTGGCTGATT TTAAGCCATT    120
TAAAATTTAT ATAAAACAAC CTTCCATAAA AATTGACAG GTGCCAGAT GTTGCTTTCT    180
CCATTTATTT TTTGTTTTTT TTTAATCACA CTCGAG                                     216
```

(2) INFORMATION FOR SEQ ID NO:578:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 294 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTAA	GTGCCGAAAA	CTTCACTGTG	CTCATCAAGA	60
ACAATATCGA	CTTCCCCGGC	CACAACTACA	CCACGAGAAA	CATCCTGCCA	GGTTTAAACA	120
TCACTTGTA	CTTCCACAAG	ACTCAGAATC	CACAGTGTCC	CATTTTCCGA	CTAGGAGACA	180
TCTTCCGAGA	AACAGGCGAT	AATTTTTCAG	ATGTGGCAAT	TCAGGTTGGT	GGTGCTTTGT	240
ACACTGGGAT	GTGGGGCTGT	GTGTCTAGGG	ATGGAGGATG	TCAAACAAC	CGAG	294

(2) INFORMATION FOR SEQ ID NO:579:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

GAATTCGGCC	TTCATGGCCT	ACCTTCACAG	AAAAATGCAT	AGCTGGATGC	TGCAGACTCT	60
AGCGTTTGCT	GTAACATCTC	TCGTCCTTTC	GTGTGCAGAA	ACCATCGATT	ATTATGGGGA	120
AATCTGTGAC	AATGCATGTC	CTGTGAGGA	AAAGGACGGC	ATTTTAACTG	TGAGCTGTGA	180
AAACCGGGGG	ATCATCAGTC	TCTCTGAAAT	TAGCCCCCCC	GATCTCGAG		229

(2) INFORMATION FOR SEQ ID NO:580:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC	TTCATGGCCT	AGCTTACTTT	ACAATTCTGC	TGTTTGTC	GTGTTCTCTAT	60
AGTTTTTTTT	AAAGGTATGT	TAACTATTTT	TCCCTTTTGG	TTTATATTG	TAGGAATCTT	120
TGCCTTTAAG	TGTGCCCCTG	CAGAAGAATT	ATTTAACATG	TTGCAAGAGA	TTATGCAAAA	180
TAATAGTATA	AATGTGGAGC	TCGAG				205

(2) INFORMATION FOR SEQ ID NO:581:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAAGTGTAAT	GTCAGACACA	CAAGAAAAGC	AAATCAGTGT	TGTAAGCTTA	AAGTACAATT	60
TCAAAGGTCA	TTACCAACAG	CAGGGTTTTT	TTTATACTTT	AAAAACATTA	TGCTACATAT	120
CATTGCCATT	TTCATATTTT	GGGGTTTTGC	TACTCTTATA	CAATGGAATC	AATGGAAATG	180
TCATCCAGCC	AGATCTCGAG					200

(2) INFORMATION FOR SEQ ID NO:582:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

```

GAATTCGGCC TTCATGGCCT ACACAAATGT TTGTTGAGTG CTCATTGTAT GTCTGGAGAC      60
CATTCTGTCT TCTTCCCTAA GAGTGTTTCA GCTGTTGGAC CAGGTGTTAT GATTTTGCTC     120
TGGAGAATAA GGTATTTCCA CATGGAGCAT GTGGAAAATA TAGTGCCCTAT CTCCTGAAAG     180
GTCCAGGTGA TGCAAAGATG AATGAGACAT GATTGGAGGT TTTTCTTCTG TCTGAAATGC     240
AGACAGTTCT GGGTTGGGCA GCTCTGTAAG ATGCTGAACA TGTGTCCTTC CAAGAAGCAA     300
GGATCAGAAA GCAGACTCTA G

```

(2) INFORMATION FOR SEQ ID NO:583:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

```

GAATTCGGCC TTCATGGCCT ACACCATTGA CTTCTTCTAC CGGCCGCATA CCATCACCCT      60
GCTCAGCTTC ACCATCGTCA GCCTCATGTA CTTGCGCCTT ACCAGGGATG ACTCTGTTCC     120
AGAAGACAAC ATCTGGAGAG GCATCCTCTC TGTATTATTTT TTCTTTCTTA TCATCAGTGT     180
GTTAGCTTTT CCCAATGGTC CGTTCACCTG ACCTCATCCA GCCTTATGGC GAATGGTTTT     240
TGGACTCAGT GTGCTCTACT TCCTGTTCTT GGTATTCTTA CTCTTCTGA ATTTGAGCA      300
GGTTAAATCT CTAATGTATT GGCTAGATCC AAATCTTCGA TACGGCCACC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:584:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 374 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

```

GGAAACTTCT AGAAATAATG ACAAGGATTC AAACCTATTG TCAAATGAGT CCAATGTCAG      60
ATTTTGAAC TCAACCCTAT GAACAATGGG CCATTCAAAT GGAAAAAAA GCTGCAAAAG     120
AAGGAAATCG CAAAGAACGT GTTTGTGCAG AACATTGAG GAAGTACAA GAGGCCCTAC     180
AAATTAATGA CACAATTCGA ATGATAGATG CGTATACTCA TCTTGAACT TTCTATAATG     240
AAGAGAAAGA TAAGAAGTTT GCAGTCATAG AAGATGATAG TGATGAGGGT GGTGATGATG     300
AGTATTGTGA TGGTGATGAA GATGAGGATG ATTTAAAGAA ACCTTTGAAA CTGGATGAAA     360
CAGATAGACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:585:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 295 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

GAATTCGGCC TTCATGGCCT AGAGAACTG AGAGGAAGTT AAAGATTGT CTTACAAAGG	60
CTGTGTAGTG ATAAGACCTA AGGTTTCTC TGAGATTCAA AATGGGTATT ATTTGTTCTT	120
TAATCCTTCT GATTATCTT TTGAAAAA GGAAGTAGA GGAAAGGAAG TAGAAAAATA	180
ATATTCTTA TACTTATTAT GTACCAGACA TGGTGCTAAG TTCATTAA ACACCTGCCTC	240
ATTTAATCTT TGCAACCAAT TTATACCCAT ACACATAAGG CCACAAAAGC TCGAG	295

(2) INFORMATION FOR SEQ ID NO:586:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

GAATTCGGCC TTCATGCCTA AGGTAAGGGA AAGTGAGAAG CAGCAGGATA GTCAGCCTGA	60
AGAAGTTATG GATGTGCTAG AGATGGTTGA GAATGTCAA CATGTAATTG CTGACCAGGA	120
GGTAATGGAA ACTAATCGAG TTGAAAGTGT AGAACCTTCA GAAATGAAG CTAGCAAAGA	180
ATTGGAACCA GAAATGGAAT TTGAAATTGA GCCAGATAAA GAATGTAAAT CCCTTTCTCC	240
TGGGAAAGAG AATGTCAGTG CTTAGACAT GGAAAGGAG TCTGAGGAAA AAGAAGAAAA	300
AGAATCTGAG CCCCACCAC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:587:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 272 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

GAATTCGGCC TTCATGGCCT ACAAGGACGT TAAAGGCATT TTATTCCAGC GTCTTCTAGA	60
GAGCTTAGTG TATACAGATG AGGGTGTCG CTGCTGCTT CCTTCGGAAT CCAAGTGCCTC	120
CACAGAGATT AGCCTGTAGC TTATATTGA CATTCTTCAC TGTCTGTTGT ATACCTACCG	180
TAGCTTTTTA CCGTTCATT CCCCTTCAA CTATGTCCAG ATGTGCAGGC TCCTCCTCTC	240
TGGACTTTCT CCAAAGGCAC TGGACCTCG AG	272

(2) INFORMATION FOR SEQ ID NO:588:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

```
GAATTCGGCC TTCATGGCCT AGCATCCCTG AACTGTGTA ATTTGAGGA TCCTTCTGGT    60
CTTAAAGCCA ATTTAGAAGG TGCTAATCTG AAAGGTGTGG ATATGGAAGG AAGTCAGATG    120
ACAGGAATTA ACCTGAGAGT GGCTACCTTA AAAAATGCAA AGTTGAAGAA CTGTAACCTC    180
AGAGGAGCAA CTCTGGCAGG AACTGATTTA GAGAATTGTG ATCTGTCTGG GTGTTAGCTC    240
GAG                                                                    243
```

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

```
GAATTCGGCC TTCATGGCCT AAATTATACT CCAATGTTT TATCTAAAT GCATTTTCTG    60
TCTTTTCCTT TTTACTCTTG TCCTCACTTT TAATGATCCA TCGGCTGACA GTGTCTTTAC    120
ATCCAAAATG CAAAGCAGAC AAATGGGCAT ATCAGGGAAG AACATGACAA AAAGCACCAG    180
CATCAGTGGA GACATGTGCT CACTGGAGAA GAATGATGGC AGCCAGTCTG ACACTGCAGT    240
GGGCACCTTG GGCACCAGTG GCAAAAAGCG GCGCTCTAGC CTTGGTGCCA AAATGGTAGC    300
TATCGTTGGT CTGTCACGGA AAAGTCGCAG TGCTTCTCAG CTCAGCGGAC TCGAG        355
```

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

```
GAATTCAAAT GCTTCAGGTA AATGTTGAAG CTCGGTGTAC CGCGGGACAA ATCCTGAGTC    60
ACCCCTGGGT GTCAGATGAT GCCTCCAGG AGAATAACAT GCAAGCTGAG GTGACAGGTA    120
AACTAAAACA GCACTTTAAT AATGCGCTCC CCAAACAGAA CAGCACTACC ACCGGGGTCT    180
CCGTCATCAT GAACACGGCT CTAGATAAGG AGGGGCAGAT TTTCTGCAGC AAGCACTGTC    240
AAGACAGCGG CAGGCCTGGG ATGGAGCCCA TCTCTCCAGT TCCTCCCTCA GTGGAGGAGA    300
TCCCTGTGCC TGGGGAAGCA GTCCCGGCC CCACCCCTCC GGAATCTCCC ACCCCGCTCG    360
AG                                                                    362
```

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

```
GAATTCGGCC TTCATGGCCT ACTCAGTCTG CACAACCTTT TTGCTGTGTG TCGGAATATG      60
TATAACTGGC TACTGCAGAA TCCCAAAAAT GTCTGTGTTG TCCACTGCTT GGATGGACGG      120
GCGGCATCAT CAATTCTGGT TGGTGCTATG TTCATTTTCT GTAATCTCTA CTCTACTCCT      180
GGCCAGCCA TTCGATTGCT ATATGCAAAG CGACCAGGAA TTGGACTTTC ACCATCCCAT      240
AGGAGATACC TGGGCTATAT GTGTGACCTA CTGGCAGACA AGCCCTACCG CCCTCGAG      298
```

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

```
GAATTCGGCC TTCATGGCCT ACCGTAAGCA GATGAAGCTG CTGCTGCTGC TGCTGCTGCT      60
GAGCTGGCC GCGTGGCTCA CCTACGTGCA CCTGGGCCTG GTGCGCCAGG GACGCGCGCT      120
GCGCCAGCGC CTGGGCTACG GCGGAGATGG TGAGAAGCTG ACCAGTGAGA CCGACGGCCG      180
GGGGGTCCAC GCTGCGCCAT CCACACAGAG GGCTGAGGAC TCCAGTGAGA GCCGTGAAGA      240
GGAGACCAGC GCAGACATGC TGCGGCCAGA TCCAGGGAT TACCTCGAG      289
```

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

```
GAGAGATGGT GACTGAGGCA GAAGCTAATA GGGAAGATGA TAGGAAAGAA ATTTTACCCA      60
AGGAATTAGA TTTAGCAAGA GAGCGAAGGA AAGCTGAGAG GCCAAAAACA TCTCTGAGGA      120
AAACTGACTC TGAGAGAGAA GAGGTGACAA GGGCAAATGC ACTCAAGGAT GAAGATGCTT      180
TTAAAGAAGA GCAAAAACCT AAAGCGGAAG AAGGGGAAAC AGAGACAGAA GTAAGAGCTG      240
AGGAAGAGAC AAAAGCTCCC CCAAATGAAA TGGGATCTGA TGCTGAGAAC GAAACACTCG      300
AG                                                                                   302
```

(2) INFORMATION FOR SEQ ID NO:594:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

GAATTCGGCC	TTCATGGCCT	AGGATATTTA	AACCTCTATT	ATTTTAGACA	AGACTGTCTA	60
GAACTTAAGT	TTGATCTGTC	AGCCAGTACT	CCCATTAAAT	TCAGTGTAGT	TTCAGTTGAT	120
AGAATCAGAT	ATGTTATCGA	AATGTTAGCA	GCAGCTTCAT	CCTCCTTCTG	ATTAAAGTAA	180
GTAGAAATGG	GATGTTTTGT	TTAATAACAG	CCATAGTGTG	TGTTTAGACC	ACAGCGGATG	240
TTGTAGACCA	GGACCCTCGA	G				261

(2) INFORMATION FOR SEQ ID NO:595:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

GAATTCGGCC	TTCATGGCCT	AGGGGCTTTT	GTCAAGATAG	AAGGGTATCA	ACGGTTTCTG	60
TACAGCACAG	ATTATGACAG	CGTCTTTCTT	AAGACTTATC	ATTGGAGCA	CTGGCTCAGG	120
AGTCGAAATC	ACCAATGGCT	CATCCATCAA	TCAACCAGAA	GTGAAGACGA	AAGCTTCAAA	180
GAAGAGAAATG	TTTAAATTTC	ATCAAATGAA	ACATATTTT	GAAATACTTG	ATAAAATGAG	240
ATGCCTGAGA	AAACGTTCTA	CAGTGTCAAT	CTTGGGAGTT	CTGTGCATTT	TTCTCCTTTT	300
TATGAAGTGT	TACATTGAAG	ATAGCTATGT	TCTGGAAGGA	GACAAACAAC	TTATAAGGGA	360
AACTCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:596:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

GAATTCGGCC	TTCATGGCCT	ACTAACGACT	CATCTTTGTT	TTTAGTTTTT	TTAATTAACA	60
ATCGTTCTGT	TCACAATTTT	TAATTTCTTT	TCTTCCCCCT	TCTCCGCAA	GCACTCAGGC	120
ATCGGACACG	CTATGGTAAA	CAACTACAT	TGTCTGGTAG	ATATCATTCT	TATTGTCTCT	180
TTTTTTGGGT	TTGCCGTGTG	TTGCCCCCT	TTTCTCTCC	AACCCCCC	ATTCTCGAG	240

(2) INFORMATION FOR SEQ ID NO:597:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

GAATTCGGCT	TCATGGCCTA	GTGTATTGGT	TGTGTGTGTT	TTCTTTTTTG	CATAAGAAAT	60
ATGTCCATTT	AGTCCAGAGG	CTCTTGCTTT	ATCCGGATGA	CGGAGGGTAC	ACGGGGCGTC	120
CGCCTCAGTT	CCCGCCGAAG	GACGTATTCG	CTGAAGTGGG	ACGAGTCTAC	TCCTCCCCCA	180
CAGGAGCCCA	CGATTTCAAA	TCCTCTTTCG	TGCAACTCTT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:598:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

```

GAATTCGGCC TTCATGGCCT AGATATTTTA AAGGAGTGAT GACATCTTTT TCCTATCATG      60
TGAAGAGGGG AAAGAGAAAG GAAAGGGCCC ATATTATTGT GTTCCTGCTT GTGCCAGCTG      120
TTCTATATCT GTTGATCTCA TTAGTCCTC ATGACAGTTC TATGAGGAGG GCACTGTCAT      180
CATCACCATT GCACAGATGC AGAACTGTG GCTCACAGAG GATAAAGCTA GGTCACACAC      240
ACAACCCCT GACTCCAGAG CCACCACTCG AG                                     272

```

(2) INFORMATION FOR SEQ ID NO:599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

```

GAATTCGGCC TTCATGGCCT AGTAAGGGAG AACTGAATG GTGATTCAGA GCATAGAGAT      60
TATGTTTTTT TATGCACAGG GCTTCATCAG AAAAATGGAA GGAATTGTCA ATAACAATAA      120
AATGTTTACG TAGATCAACT CAGTATATAG TATGTATTAT ACAATTATTC AAAATAGTGT      180
TTAACAGTAC TGAATAACA TGAATAAATG TTTTGTCTATA TTAAGTGAAA AAGAGCTATA      240
TAAAATTATC TAAGTTTATG GTATATGTAG ATTGTTGCAA AAATGTCTTC AATCTTTAT      300
CCCTCCCTGT ATCCACACCT GTATCAGTTT TCTCGGGGCA GCTGCCTCGA G                                     351

```

(2) INFORMATION FOR SEQ ID NO:600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

```

GAATTCGGCC TTCATGGCCT AGAATATTTT TATCATCCCA AAGCTAAAAC ATTAAAAAAT      60
TTAAAGTTTA TTCTTAGAGA TTGATGCAAC TTGCATATCT AATCGAG                                     107

```

(2) INFORMATION FOR SEQ ID NO:601:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

```

GGAAAATTAC TTAACGTTG CACACAACGT TTCACAAAAT CTTTGTGAA AGAAGAAAAG      60
GAAATTCAGT GTGTGAGTCT CAGCAGGAGT TAAGCTAATG CAGCTTAACA TCATGCCGAC      120
AAAGAAGCGC TTATCTGCGG GCAGAGTGCC CCTGATTCTC TTCCTGTGCC AGATGATTAG      180
TGCACTGGAA GTACCTCTTG ATCTGGTACA GCCTCCAACC ATCACCCCGC TAAATCCCCT      240
AGAAGTCCCA CTCCTAAACA CATCCGTATT ACTCGAG                                277

```

(2) INFORMATION FOR SEQ ID NO:602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

```

GAATTCAAAT TAACATTTTA CCTTGAAATA GTTGGCTTCA GATTAATATC AACTTAGTTT      60
CAATAGCATA GGAAATTTGC TTCACTATAT TTCCATTTTC TCCCCGTCCT TTGTGCTATT      120
ATTACTATAC CAATTAGATC TCTACACAAT ATAGGCATAT CAACACATTT TGTAATTATT      180
TCCTTATCCA GTTGCTTTT AATATAGATC TGTGAAGAAA AGTATTACAC AAATAGATCT      240
ATTCTGTTTT TTATAATTAT TTAATTACCT TTGGTGGTGC TGTTTATTTT TCATGCATTT      300
GAGTTACTGT CTAGTATTCA TTCATTTCTC TCTGAATCAC TCCCCGGTAT TGCTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

```

GAATTCGGCC TTCATGGCCT AGCCATCTTA TTTGAACTAT ATTTTTCCTT CAAAGAAGCA      60
ATAGGTCTCA ACATAGTGTA GGTAGCATCA GGTGACAGAA AGCCAATTTT ATTTTCAAAT      120
TTAAGTTAAT TATCTTCGTG ATCCTATTTA TCCACAATTT CTTTCAGAAA AGACTGAAAA      180
AACACATTAT ATTCAGGAGA TATAATGAAA TTATTGGAAG GCATCACTCG AG              232

```

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

GAATTCGCCC	TTCATGGCCT	AAATATTTTC	CATCTTCCTC	TCCAGTAAAC	ATTCTTTTGT	60
CATCACAGTC	TGTCTCTGAC	ACCTTCGTTA	AAGAGGTCTT	AAAATGGAAA	TATGAAATGT	120
TTTGAACCT	TGTCAGTGT	GGGCCCCCTG	CAAGTCTTTG	TCAGTCCATC	TCAAGACCTG	180
TGCCTGTGAG	ATTTCACAAT	TATGGAGATT	ATTTTAATGT	TTTTTTCCTT	TTGATGGTAT	240
TGAATACTTT	TGAAACAGTG	GCACAAGCGG	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:605:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

GAATTCGGCC	AAAGAGGCCT	AAAAATATAA	TTAAAAATA	CATTGCGTAT	TTTCTAAAAC	60
AATAAATTTA	TAGTGTTAAT	ATTCATAGGG	TCAATCAAAA	TGAAGCTTCT	CCTTTGGGCC	120
TGCATTGTAT	GTGTTGCTTT	TGCAAGGAAG	AGACGGTTCC	CCTTCATTGG	TGAGGATGAC	180
AATGACGATG	GTCACCCACT	TCATCCATCT	CTGAATATTC	CTTATGGCAT	ACGGAATTTA	240
CCACCTCCTC	TTTATTATCG	CCCAGTGAAT	ACAGTCCCCA	GTTACCCTGG	GAATACTTAC	300
ACTGACACAG	GGTTACCTTC	GTATCCCTGG	ATTCTAACTT	CTCCTGGATT	CCCCATGTTC	360
TATCACATCC	GTGGTTTTC	CTTAGCTACT	CAGTTGAATG	TTCTCTCTCT	CCCTCCTAGG	420
GGTTTCCCGT	TTGTCCCTCC	TAATCTCGAG				450

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GAATTCGGCC	AAAGAGGCCT	ATCAGGTGAT	TTAATAATAA	TTTAAAACTA	CTATAGAAAC	60
TGCAGAGCAA	AGGAAGTGGC	TTAATGATCC	TGAAGGGATT	TCTTCTGATG	GTAGCTTTTG	120
TATTATCAAG	TAAGATTCTA	TTTTCAGTTG	TGTGTAAGCA	AGTTTTTTTT	TAGTGTAGGA	180
GAAATACTTT	TCCATTGTTT	AACTGCAAAA	CAAGATGTTA	AGGTATGCTT	CAAAAATTTT	240
GTAAATTGTT	TATTTTAAAC	TTATCTGTTT	GTAAATTGTA	ACTGATTAAG	AATTGTGATA	300
GTTTCAGCTTG	AATGTCCTCT	AGAGGGTGGG	CTTTTGTTGA	TGAGGGAGGG	GAAACTTTTT	360
TTTTTTCTAT	AGACTTTTTT	CAGATAACAT	CTTCTGAGTC	ATAACCAGCC	TGGCAGTATG	420
ATGGCCTAGA	TGCAGAGAAA	ACAGCTCCTT	GGTGAATTGA	TAAGTAAAGG	CAGAAAAGAT	480
TATATGTCAT	ACCTCCATTG	GGGAATAAGC	ATAACCCTGA	GATTCTTACT	ACTGATGAGA	540
ACATTATCTG	CATATGCCAA	AAAAATTTTA	AGCAAATGAA	AGCTACCAAT	TTAAAGTTAC	600
GGAATCACCT	CGAG					614

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GCGAAGACCA TCAATGAAT TGTCACAATA CTCGAATAAT GCAAGACACA GAAAAGGATG	60
ATAACAATAA TGACGAATAT GACAATTACG ATGAACTGGT GGCCAAGTCA TTGTTAAACC	120
TCGGCAAAAT CGCTGAGGAT GCAGCCTACC GGGCCAGGAC TGAGTCAGAA ATGAACAGCA	180
ATACCTCCAA TAGTCTGGAA GACGATAGTG ACAAAAACGA AAACCTGGGT CGGAAAAGTG	240
AGTTGAGTTT AGACTTAGAC AGTGATGTTG TTAGAGAAAC AGTGGGGCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

GAATTCGGCC TTCATGCTTA CTCAGAAAGC CACTGCCCCA AACAAGCCAC CTGCATTATC	60
AAACACAGAG AAGAGGAATC ATTCCGCCTT TTGGGGACCA GAGAGTCAAA TCATTCTGT	120
GATGCCAGAT AGTAGTTCCT CAGGGAAGAA CAGAAAAGAG GAAAGTTATA TATTGAGTC	180
AAAGGGTGAT GGAGGAGGAG GGGAACACCC AGCCCCAGAA ACAGGTGCAG TGCTACCCCT	240
GGCGCTGGGT TTGGCTATCA CTGCTCTGCT GCTTCTCATG GTTGCATGCC GACTACGACT	300
GGTGATCCTC GAG	313

(2) INFORMATION FOR SEQ ID NO:609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

GCCCATTCGG GCCCCATCT CACCCAAGAT CCCCAGAGT CCAGGAGCTG GACGGGGACA	60
CCCTCAGCCC TCATAACAGA TTCCAAGGAG AGGGCACCCCT CTTGTCCTTA TCTTGCCCC	120
TTGTGTCTGT CTCACACACA TCTGCTCCTC AGCACGTCGG TGTGGGAGG GGATTGCTCC	180
TTAAACCCCA GGTGGCTGAC CCTCCCCACC CAGTCCAGGA CATTTTAGGA AAAAAAAT	240
GAAATGTGGG GGGCTTCTCA TCTCCCCAAG ATCCTCTTCC GTTCAGCCAG ATGTTTCTG	300
TATAAATGTT TGGATCTGCC TGTATTATT GGTGGGTGGT CTTTCTCCC TCCCCTACCA	360
CCCGTCCTCG AG	372

(2) INFORMATION FOR SEQ ID NO:610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

GGAGCTAAAT TTAAGAAATG CAACTAGCCA GGTGCTAAGA AGCTCAGTTA CACGTTTCTC 60
 AAAAGTTGGC TGTTAGTTCC ATGACTCAGA GTGCACTCAA ATCATTTTAA TTA CTGAG 119

(2) INFORMATION FOR SEQ ID NO:611:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 474 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

GAATTCGGCC TTCATGGCCT AGGTCCTGTT TGCCTATTTG AGCTGCTATT AGTGTGAGAA 60
 GAAACTCAGA TGATAGTAGC AGAAACAGAA AGAGGAAGAG GCTACAAGAG ATGGTAGATG 120
 CTGAACTTAA GGCATTGAT AACCAATGGA TATAGAAAGA AAAGGAAATG AAAGGACAAA 180
 AATGGCTCTA AGTTTTCAAA CTTGACTGAT GAGGAAAATA TTCACATCAA GAATGGACTG 240
 AAGAAATAAG GAGGAGATGC TGGGTTAGGG TGAAAGGAGA TGAGCCCCAT TTTACATTGG 300
 AAAGCTCTAT GGAACAACGG AAGTAGTAGT AGCTTTATAT TCCAGTATGC CAAATTCTCA 360
 GCTCCAAGAC TCCAGCACTG TGTGCTCTAC AGTATGTTTT GTGATGTGCC TGAGTTTGG 420
 TTTCTTTATT TCAATTAGGG ACTCTTCATA CCAGGGTCAG GGGTTATGCT CGAG 474

(2) INFORMATION FOR SEQ ID NO:612:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 283 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

GAATTCGGCC TTCATGGCCT AGTTCCTGTG CTCTTGAAAG AACAAAGTTGA TGCTTGTA 60
 GCTGTTTGA TTATTTTAG GCGCATGATA ATGGAGCTTA CAATGAATAA AAAGACATGG 120
 GAACAGATGT TGCAAATACT ACTCAGGATA ACAGAAGCTG TCATGCAGAA GCCAAAGGAT 180
 AAACAAATAA AGGACTTGTT TGCCAGAGC TTGGCAGGGT TACTATTAG GAGCCTCATG 240
 GTAGCTTGA TCCGAGCAAA CCTCTGTGTG TACATTTCTC GAG 283

(2) INFORMATION FOR SEQ ID NO:613:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 280 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

GAATTCGGCA CGAGGGGCCG CCGTTTTTTT TTTTTTTTTT TTTTCAGGTG CACATAAAGT 60
 TAGTTTATTA ATGACTATAT TTTGAAGCCA GCCATTTTGT CCAATATTTA AATAACAAGC 120
 TGTTTAATAT TAAAGCAGAA AGTACTGCCA CATTGTGACA GAAGTACAGC TTTATCCATA 180
 AACCTTCAC ACAATTATAC ATTAAATGCT ATTTTATT AAGCAAGGCA CCCCTACTTG 240
 TTCTAAATA TGGGATGTAC TACACCATGT ATTACTCGAG 280

(2) INFORMATION FOR SEQ ID NO:614:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAACCA AGAATTCGGC ACGAGGGAAT      60
GAAATTAGCT AACAGCCTTC AGCTACAGAA ACTTTGGGAT CCAGACAGCA TTTGAGCTGA      120
CGCCACGCCC TTCTCAGGCA GCCCCACAG TGAAGGAGGA GGATCTAGAA GGGCCTGGCC      180
ATTTTTCCTC AATGTAGGT CCCTCTGATG GGAATTCTTT GTCTGGAGAC CCGAGCTGAG      240
ACTTGTCTAG ATTGGCATCT CTGTCCCTGC TCAATGCTGC TTTCCATGCT CCCTTTTCTA      300
TCACAGACAT CATAGCCTGA AATCTTTCCA CACCCAATAC TGCTTCCTAT ACCCCTTAGC      360
CTTTCCTGAT CTCATTGAGG TTACCATTTT TCCTCCGTCG CTCGAG                      406

```

(2) INFORMATION FOR SEQ ID NO:615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGCTTT      60
TTTAGGTAAT TCTTGTACT CCTGCTGTCT ACCTCTCCTC ACACCCAGC ACCCCCATTT      120
TTTTCAAACC TTGGTATCTG TTGGGTGAAC AGTATAATCT TTTTCATCTG TTTTAGAATG      180
TGGGATATTT CAGTACCTA CTTTTTTTTT TTTTTTTTGC TGAATCCAAA GATATATAAA      240
TAAATATAT ATATTTTATA AAGATCAGAA TGATATAAAG GAGATACATG TTTCTTCCTT      300
TAAAAAATAA ACGGAAGTTA CATTTGTAAT GTTCATATTA TGATGCGAAT TCTCTGGTTC      360
CTCCTCGAG                      369

```

(2) INFORMATION FOR SEQ ID NO:616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```

GAATTCGGCC TTCATGGCCT AGGATGTCTG AGGTCTTAAC CTGCCCAGTC CTGAATTCCT      60
GGGACTTCAA CGACTCTCTC TCTGCCAAAT GATGTGAGTC TTTAGGTAGA GTTATAGCGC      120
AAAGGGCTAC TATCAATGTT ATTAAGCATA AATTATGACT AGAGCCACAG AATGATTTC      180
TCATTAATCC AAAAAAAAAA AAAAAGCAAA CCACTCTTTT ACTTTATGAT GAGCACATAA      240
ACAGTTTTTT TTTCTTTTA TTTATCTACT TTTACTTACT TAAATTTTAG AGATGGGGTC      300
TTGCTATGTT GCCCAGACTA GACTCAAACCT CCTGGGCTCA AGTGATCCTC TAGCCTCAGC      360
CTCCCAAGTA GCTGGGACTA CAGGAAGGAG CTACTGCACC TGACTCAATT TTTTTTTTTT      420

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CTGAGATGGA GTCTCACTCT GTGACCCAGG CTTGTCTCGA G

461

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC	TTCATGGCCT	ACATCAATAA	CAGCCAAACT	GAGACACATA	ATGTTTCTA	60
CGTCCAAGAG	GCTAAATGTG	AGAATCCAGA	ATTTGAGAGA	AATGTGGAGA	ATACATCTTG	120
TTTCATGGTC	CCTGGTGTTT	TTCCTGATAC	TTTGAACACA	GTCAGAATAA	GAGTCAAAAC	180
AAATAAGTTA	TGCTATGAGG	ATGACAAACT	CTGGAGTAAT	TGGAGCCAAG	AAATGAGTAT	240
AGGTAAGAAG	CGCAATTCCA	CACTCTACAT	AACCATGTTA	CTCATTGTTC	CAGTCATCGT	300
CGCAGGTGCA	ATCATAGTAC	TCCTGCTTTA	CCTAAAAAGG	CTCAAGATTA	TTATATTCCC	360
TCCAATTCCT	GATCCTGGCA	AGAATCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC	TTCATGGCCT	ACGTGAAGAC	AAGATGAAGT	TCACAATTGT	CTTGCTGGA	60
CTTCTTGGAG	TCTTTCTAGC	TCCTGCCCTA	GCTAACTATA	ATATCAACGT	CAATGATGAC	120
AACAACAATG	CTGGAAGTGG	GCAGCAGTCA	GTGAGTGTCA	ACAATGAACA	CAATGTGGCC	180
AATGTTGACA	ATAACAACGG	ATGGGACTCC	TGGAATTCCA	TCTGGGATTA	TGGAATGGC	240
TTTGCTGCAA	CCAGACTCTT	TCAAAAGAAG	ACATGCATTG	TGCACAAAAT	GAGCAAGGAA	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCAAGG	CCACGCCGGA	GCTGTACCTT	GGAAGGAGGA	GCCAAAAATT	ATGCTGAGAG	60
TGATCACAGT	GAAGACGAGG	ACAATGACAA	CAATAGCCCC	ACCGCAGAGG	AGTCCACGAA	120
GAAGAATAAG	AAGAAACCAC	CGAAAAAATA	GTCTCGTTAT	GAAANGACAG	ATACCGGTGA	180
GATAACATCC	TACATCACTG	AAGATGATGT	GGTCTACAGA	CCAGGAGACT	GTGTGTATAT	240
CGAGAGTCGG	AGGCCAAACA	CACCGTATTT	CATCTGTAGC	ATTCAAGACT	TCAAACGGT	300
AAGCGTTTTT	AATGTGCTGT	TCACTCTGCT	CTGTATTCTC	TCTTTTCCA	GTTCCATTGG	360

CGCTCTCGAG

370

(2) INFORMATION FOR SEQ ID NO:620:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 183 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

GAATTCGGCC TTCATGGCCT AAAAACCTTA CAACTAAAGC AAATAGACTT TTCAAGAATT	60
TAAATAGGAT TCCTTCCCTT TAATCAATTA ATTATCCACT TTGTCATGGT GTCAACCTGT	120
AATTCATGG TTTTGTGTGT GTGTGTGTGT GTGACAGAAA TTTACAAACA ATGTGATCTC	180
GAG	183

(2) INFORMATION FOR SEQ ID NO:621:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

GAATTCGGCC TTCATGGCCT ACAACTAATT TGATCATATT AACAGAGGT TGGTTTTTAA	60
ACCAAGCAGT ATAAATATAA ATACAGCCTT GGGTAGATCA TAGTCAAATC ATCCAAATGC	120
AACCTCAGCT TCAAAGATTG TAAAGTCTTT TCTTTCCCCT TTTCTCCTTT CCTTTTTTTT	180
TCCTCCAAAT ATTTATTTAC TACCTACCAT GTGCCAGGCA CTGTGATGGG CTATGAGGAT	240
GCAGTGGGG ATAGGACAGA TGCCATCCCT GCCCTGAGGA GACTTGCAGT TTATTGGAAG	300
AGATGGACAT CGTAAATAT ACAATCATAC AAATAAAAAAT TACATAAATA ATTCAGTACT	360
TCAACTTGTG GGAGGTACAG CAGTTTATAA TAATAACATC CCTCCCACCT TCTTGAGAGA	420
GTCATTGGTT GCCCCACTTC TCTTCATGAA TGAGAGGACA TGATTAAACC TATCATTTCA	480
GGTAGGAGTT TACTGTGGGA TGGATATCAA TCTTCTATTA ATATGTTTGT GCTCATGCTC	540
TCCATTTTGC AATGGACGTC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

GAATTCGGCC TTCATGGCCT AAAATGAAAG CTATGTCTTA GAACCAATGA AAAGTGCAAC	60
CAACAGATAC AAACCTCTCC CAGCGAAGAA GCTGAAAAAGC GTCCGGGGAT CATGTGGATC	120
ACATCACAAC ACACCAAACC TCGCTGCAAA GAATGTGTTT CCACCACCCT CTCAGACATG	180
GGCAAGAAGG CATAAAGAG AGACCCTCAA GGCAACTAAG TATGTGGAGC TGGTGATCGT	240
GGCAGACAAC CGAGAGTTTC AGAGGCAAGG AAAAGATCTG GAAAAAGTCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

```

GAATTCGGCC TTCATGGCCT AGCTTCTGGT AATGGCGGAC TAGATGATTT AGAGCAACCC      60
ACCCATTGAA AAGAACTACA AAACGTCAGA TCTCTAAAAG GCTACAAAAT TAATACAATT      120
GTGAGGAATT GCTAGGTAT ACTACAAGAG AACAGAAGCA TCCAGAGAGG TAAGCCTAGG      180
ACTTAAAACT ATATTTTAT TGAAGGTATC TGTGGTTGAG TAATAAGCCT GTGCTAACT      240
GCGTGGAAC TATGGCACA TCAAGGCACT ATAGTAACAG AAGTCAGAGC CCAAGGCCCA      300
TCAAAAGGGG TGGAGTGTTT CCTGACAAAC CATCACCCAT AGTATGCTGG GAACCGCAAA      360
TGTTTATACC TTCAGGGTAA TTGTAATCAA AAAATATACT AGCCCTTACA AAGTCTTGTA      420
GCTTGGCTTT GCATCATCTG GGTGGACTAG TGAAGTGTA GTTCTGAACA AATATTATGG      480
AGGCAACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

```

GAATTCGGCC TTCATGGCCT ACTTCCCTGA GCTGGGGTTT CCCTGCTTGT CCAGTTGTGA      60
GCTGTCTCTG GTGTTACCGA GGCTGTGCCT AGAGAGTGGA GATTTTGTAT GAAAGGTGTG      120
CTCGCTCTCT GCGTTCTATC TTCTCTCTCC TCCTTGTTC TGCAAACCAC AAGATAAAGG      180
TAGTGGTGTG TCTCGACCCC ATCAGCCTCT CACCCACTCC CAGACACACA CAAGTCCTCA      240
AAAGTTTCAG CTCCGTGTGT GAGATGTGCA GGTTTTTTCT AGGGGGTAGG GGGAGACTAA      300
AATCGAATAT AACTTAAAT GAAAGTATAC TTTTATAAT TTTTCTTTT AAAACTTGGT      360
GAAATTATTT CAGATACATA TTTTAGTGTC AAGGCAGATT AGTTATTTAG CCACCAAAAA      420
AAAGTATTGT GTACAATTG GGGCCTCAA TTTGACTCTG CCTCAAAAAA AAGAAATATA      480
TCCTATGCAT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

```

GAATTCGGCC TTCATGGCCT ACAAATTTGA TTATGACAAG ATTGTCTACT ATGAAGCAGG      60
GATTATTCTA TGCTGTGTCC TGGGGCTGCT GTTTATTATT CTGATGCCTC TGGTGGGGTA      120
TTTCTTTTGT ATGTGTCGTT GCTGTAACAA ATGTGGTGGA GAAATGCACC AGCGACAGAA      180

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GGAAAATGGG	CCCTTCCTGA	GGAAATGCTT	TGCAATCTCC	CTGTTGGTGA	TTTGTATAAT	240
AATAAGCATT	GGCATCTTCT	ATGGTTTTGT	GGCAAATCAC	CAGGTAAGAA	CCCCGATCAA	300
AAGGAGTCGG	AAACTGGCAG	ATAGCAATTT	CAAGGACTTG	CGAACTCTCT	TGAATGAAAC	360
TCCAGAGCAA	ATCAAATATA	TATTGGCCCA	GTACAACACT	ACCAAGCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GAATTCGGCC	TTCATGGCCT	AGTTAGGTGG	CTTTTAGTGT	ATTGACAAAG	TTGTGAACCC	60
ATTATCACAA	TCTAATTTTA	GAACATTTTT	ATCAGCCTCC	TTGCCCCCTA	AAAAAACCCA	120
GTACTTTTTA	CCAATCCAGT	CATTTAAAAC	TTACTACATA	TTTAATAGAT	GGATAGATAG	180
ACAGGAGGAT	GGACAGACTG	AAGGAAGAAT	GGATGATTAT	GTATAAATAA	ATGAAAAAAC	240
AAAAACTATC	CCCAATCAT	AAGGGTATAC	GCAATGCTTT	CCTGTGGCAA	AAGATTCGGA	300
ACATGTACAG	CAGATTTTTT	TTCAAATGTT	CATAATTCTA	AATTCCCAAA	ATGGTCTACA	360
CAACTTCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 575 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGGCC	TTCATGGCCT	AGGAGAAAGG	AAGGGAAGCA	TTACTGGGTT	ACTATGCACT	60
TGCGACTGAT	TTCTTGGCTT	TTTATCATTT	TGAACTTTAT	GGAATACATC	GGCAGCCAAA	120
ACGCCCTCCG	GGGAAGGCGC	CAGCGAAGAA	TGCATCCTAA	CGTTAGTCAA	GGCTGCCAAG	180
GAGGCTGTGC	AACATGCTCA	GATTACAATG	GATGTTTGTC	ATGTAAGCCC	AGACTATTTT	240
TTGCTCTGGA	AAGAATTGGC	ATGAAGCAGA	TTGGAGTATG	TCTCTCTTCA	TGTCCAAGTG	300
GATATTATGG	AACTCGATAT	CCAGATATAA	ATAAGTGTA	AAAATGCAAA	GCTGACTGTG	360
ATACCTGTTT	CAACAAAAAT	TTCTGCACAA	AATGTAAAAG	TGGATTTTAC	TTACACCTTG	420
GAAAGTGCTT	TGACAATTGC	CCAGAAGGGT	TGGAAGCCAA	CAACCATACT	ATGGAGTGTG	480
TCAGTATTGT	GCACTGTGAG	GTCAGTGAAT	GGAATCCTTG	GAGTCCATGC	ACGAAGAAGG	540
GAAAAACATG	TGGCTTCAAA	AGAGGGGATC	TCGAG			575

(2) INFORMATION FOR SEQ ID NO:628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

```

GAATTCGGCC TTCATGGCCT AACAGGGTCT TGCTCTGTCA CCCGGGATGG AGTGTAGTGG      60
CGCAATCACA GCTCACTGCA GACTCAGCCT CCCAGGATCA AGCAATTCTC CCACCTCAGC      120
CTCCCAAGTA GCTGGGACCA CAGGTGCACA CCATCATGCC CAGCTAATTT TTGTATTTTT      180
TTGTAAAGAC AGGTTTCACT GTGTTACCCA GGCTGATCTC GAACTCCCGT ACTCAAGCAA      240
CTCCCCACCT CAGCCTCCCA AAGTGCTGGG ATTACAGACG TGAGCCACAG CGCCGGGCCC      300
CAAAATCTAT TTAAATGTA AAGAAACCCA AAAGTAACAG TTTTGTAAAA GAAAATTCAC      360
GTACTGTTTT GTAGTAAATT CTAAACACTG TGTATCTTTG TGTCTAGTTA AATCCTAGGC      420
TTACAGCTAA AATTCATGA GAAGGCAAGT ACTCGAG                                457

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(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

```

GAATTCGGCC TTCATGGCCT AGAAAGCTAT CATTTATTGA GAGTTAATTG TATATTAAGT      60
ACCATGCTAA GTGCTTTGTA TGTATTATTT ATCTTTATAA AAATCCTATG AAATGAATAC      120
TGTTATTTTC CCCCATTTATA CAGATGAAGA TAGAGAAAGG AAGAAAAGGG AGGGAAGAG      180
GAATACCATT TCACTGAGCA ATTTTACTGA AATATTTTAT GGAGCATTG TGGGTTTGT      240
TTGTTTGCTT GTTTGTTTT TTTGTTTGT TTTTTTTTG AGACAGAGTC TCACTTTGTC      300
GCCCAGGCTG GATCTCGAG                                319

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(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

```

ACGGTGAAAC CCTGTCTGTA CTAAAAATAC AAAAAATTAG CGGGGCATGG TGGTGGGCAA      60
CTGTAGTCCC AGCTACTCGG GAGGCTGAGG CAGGAGAATG GCATGAACCC AGGAGGCGGA      120
GCTTGCACTG AGCCGAGATC ACGTCACTAC ACTCCAGCCT GGGCGACAGA GCGAGACTCC      180
GTCTCAAAAA AAGAAAAAAC CAAGACAAAA CAAAAATAA CTTGTCTGT TAAGTACAAT      240
ATCTGTGTTC CTCAGGGACA GTTCTATTG ACCATTGTTT TTCTTGTGCA TAGACTATCC      300
TTTCCTTTTT TTGTACATCT TGAATTTTT GTTTATTAA AACTGGAATT TAAAAATAA      360
TGCAGTGTGG CAACTCTACT GCTTGATTG GCTCAAAGGT ATATTATTA TTTTAAATA      420
TAACAAACCA ATATTTGGGT TCTCTATTCT ATAGTTTTAG CATTTTGAAT GCAACAACCTG      480
TCTTATTCAC CATTTAATTC TCAGTACTAC CGTTTCTAGT ACACAATATG CACTTAATGA      540
ATATGAGGGT CCTCGAG                                557

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(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

GAATTCGGCC	TTCATGGCCT	AGACCGTGCC	AGGTATTGAG	AGCGACCCTC	ACATTCCTAC	60
AGTGCTCTGT	GTGGCATCTT	AATGAAACTT	TATTCTCTCC	CCTTAAATGA	GAAAGAATAG	120
CTAGTTGTCA	TCCTTTCTGA	ACCGATTTTG	TCTTTCAAAG	GTAGTAGTGT	ACCAGGCCTG	180
CTATTTTGCA	AAACGGTCTC	CACCAAAATC	GAATTACCTG	CCTCGCGGGG	CAGGCGTGTT	240
GACCAGGTGG	ACTCTAGAAG	TAGGTGGTTT	GCTTGGTTTC	TTTTCCTTTT	AAGGTTTCCC	300
TTTCTTCTTC	TTCTTTTCTG	TGTTTTTTTT	TTTTTTTTTT	TTTTTTCAAT	ATAGAAACTG	360
TCCCTAAGAG	AGGAAACCTT	TCTGGCCATG	TTATTCCAGG	AATCTTTTGT	CCCCTAAGTT	420
TGACCTTGTT	CTTTCGTTCA	CCCTTTACTC	TTGCATCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:632:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

GAATTCGGCC	TTCATGGCCT	ACATAAAATC	AGTTGACTAT	TGTGCAACAT	AGAATTATTG	60
TTTGTGTGAA	ATTACCGCTG	AAGGACCTTG	CCTACATTCA	AGGGTCTATT	TTTATTTTTC	120
CAGGTATTCT	TTACATTAG	TGACATTATA	GTCTAGTACA	ACTGCTTGAT	AATTTGGAGA	180
AACTAACATT	AATTTTAGAT	AGTGATTGAT	AAAATTGGGC	CTGCCAAATG	CATTTTAAAA	240
ATAATTCTAG	GATTTATCTA	TGCTCATTTT	TAGTATACCT	CATGATATAT	AAGACATCTT	300
CTTTTGTCA	TATCAGTTCT	TCAGATACTA	AGACAGAGGT	CCTCGAG		347

(2) INFORMATION FOR SEQ ID NO:633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

GAATTCGGCC	TTCATGGCCT	AGGTGGTGCA	ATAATTATAA	ATGTTGCCAG	TCAATGCCAA	60
CCAGTGTCTG	ATTGGCTTCC	TGTGCATGTC	CAATTTCTCT	TGTGACACTG	TGTTGGTGCC	120
AGAGCTTCTG	AATCTTCTTG	AATCGCTCTT	TGCATAAATG	TAAAGGATTT	CCCCGTCTGA	180
GTCCCTGGTC	GGTCTCCCCA	TAATCATCAA	GGTAAGGAGG	AGAATAAAAA	CAGCCTTTGG	240
TTTTGCCAGC	TAAAAATAGC	ACCTGACATT	CCCGTACTCT	CAGGAAGATG	CCCACTCCAG	300
AGCCACAGGA	GTAGGTGTGA	GCTGTGCAGG	CTCCTACATC	CTCCCCCTCC	AGTTCAGTCT	360
GGCAGCAGTA	ACTCTGGGAG	CACAGCAGAG	ATCCGCACAC	AAGGCACAGA	GTTGGGGCTC	420
TGCTCTTATC	ACCACCTGAT	TCGGGGCACC	TCGAG			455

(2) INFORMATION FOR SEQ ID NO:634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

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GCATGAAGGC CGGCCTTCAT GGCCTACAGG CTATGTACTG TATGATTCCA AATATGACAT    60
TCTGGAAAAG GCAAAACCAG GGACACAGTG AAAAGATCAG GGGTTGAGAG GGGAAAAAAG    120
GAGGGATGAG TAATCAGAAC ATACAAGATT TTTTAAAGGC AGTGGAACCG CTCTGTATAA    180
TACCATAATA GTGGATACGT GTCATTATGC ATTCATCCAA ACTCCTAGAA TGTACAGCAC    240
AAATAGTGAA CTGTAATGTA AATGCAGTGT GTAGGTGTTT ATACAAAAAA ACAGATGGAA    300
AGATTTTGTG CATAGCTCTA TGTGAAAATG TATTTATTTA TTAAGAGCAA AAATATGCTT    360
ATTTCAAATT TCCACGTACG ACTTTTTCAG AAAGACACGA TCCACTGAAA TAACCTCCA    420
AAAGAATTTC TATAATCTAT AGCAGGTGTA CATGTTGTTA ATCAAGTGCT TAATGTTACT    480
CGAG                                                                    484

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(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

```

GAATTCGGCC TTCATGGCCT ACCCCACCAG AGGACAGACG TTGAAAGATA CCACGTCCAG    60
TTCTTCAGCA GACTCAACTA TCATGGACAT TCAGGTCCCG ACACGAGCCC CAGATGCAGT    120
CTACACAGAA CTCCAGCCCA CCTCTCCAAC CCAACCTGG CTGCTGATG AAACACCACA    180
ACCCACAGACC CAGACCCAGC AACTGGAAGG AACGGATGGG CCTCTAGTGA CAGATCCAGA    240
GACACACAAG AGCACCAAAG CAGCTCATCC CACTGATGAC ACCACGACGC TCTCTGAGAG    300
ACCATCCCCA AGCACAGACG TCCAGACAGA CCCCAGACC CTCAAGCCAT CTGGTTTTC    360
TGAGGATGAC CCCTTCTTCT ATGATGAACA CACCCTCCGG AAACGGGGGC TGTTGGTCGC    420
AGCTGTGCTG TTCATCACAG GCATCATCAT CCTCACCAGT GGCAAGTGCA GGCAGCAGTC    480
TCTCGAG                                                                    487

```

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GAATTCGGCC TTCATGGCCT AATTTTATTT AAATTTTAT ATTTATATAT TTTATTTAAA    60
ATTTTCATGA AATGGCCAAG CAGGGTTTAA TATAAAATGG AAACAGGGTT TATCTCAGAA    120
ATTTGGTGGC TAAATTCCTT GTATCCCGTC TTATCTAGGG ATGTTGTTTG TTTCAAGGTT    180
CTACCTTGAG AGGAGCCTGT CATTTCCTTT TTTGTGTGCT GCTTGCCTA GTTGACATCT    240
TGGCTTTATG TGCTCCTGTT GAATGCATTG GAAATTTTC TTTCTTCTTT CTATGCTCTG    300
AAATAGCTTA TATAAGAGGG AAATCTCGA G                                                                    331

```

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 625 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

GAATTCGGCC	TTCATGGCCT	ACAAAAATAC	TTTCATTTGT	TTTGCTATTA	CTAGTTTCTC	60
ATTTTTTATT	GCACTTGCAA	TCATTTTAGG	AATATCCTCA	AAATATGCTC	CAGATGAAAA	120
TTGCCCAGAT	CAAATCCTC	GTCTCAGGAA	TTGGGATCCA	GGACAAGATT	CTGCAAAGCA	180
AGTTGTTATC	AAGGAGGGGG	ATATGCTCCG	TCTGACCTCA	GACGCCACCG	TGCATTCTAT	240
AGTCATTTCAG	GATGGAGGAC	TGCTTGTATT	TGGGGACAAT	AAAGATGGAT	CCAGAAATAT	300
TACTTTGAGG	ACTCATTACA	TCCTGATCCA	GGATGGTGGG	GCGCTTCATA	TTGGAGCAGA	360
AAAAATGCCGC	TATAAATCCA	AAGCGACAAT	TACCTTGTAT	GGCAAGTCAG	ATGAAGGTGA	420
AAGTATGCCA	ACATTTGGCA	AAAAGTTTAT	TGGTGTGGAA	GCTGGCGGGA	CACTGGAGTT	480
ACATGGGGCA	CGGAAGGCAT	CGTGGACGTT	GTTGGCAAGG	ACCCTGAATT	CCTCAGGCTT	540
GCCGTTTGGG	TCCTATACCT	TTGAAAAGGA	CTTTTCCCGG	GGCCTCAATG	TGAGGGTCAT	600
TGACCAAGAC	ACGGACGCTC	TCGAG				625

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 506 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

GAATTCGGCC	TTCATGGCCT	AGAGAACTTT	TTGAGGGCTT	TTTTTTTCC	CCTTTTAAGC	60
TATTTTGTAT	GTAGACTTAA	TTTTTCTAAT	TTTGCCACTT	CTGGCAATCT	GAAATCATTA	120
AAAAGGACAC	AATTCAAATT	TATGTTAAAG	GTCAATAAAT	TTGCCCAGGA	CTCAATATTT	180
TCTCATTTTT	CCAAAAATAA	AATCTTATTT	ATGCATTATA	GCGACTTGGT	TTTCACTTTA	240
TCTTGAATTA	TAGCTTTTAA	GAGGCAGAAA	GAATCCTTTT	TATAAGGACA	GTCTCAAGTG	300
TACACACAGA	TTAAATATTA	CAAATATAGG	TTGCAAATAA	AACTTTCAAA	ATGTGGGATT	360
ATAGGAAGCA	AAAGAGAACC	AACCAAAGCA	TCAACAAATT	TACCTTTTGG	TTTTTTTAA	420
AGATTTTCT	TATTTCTTA	GCTGCTTTTG	CATTAGCATT	AAATAACATT	CTTATTGGAG	480
TGGTATGTGC	ATGGCCCAAG	CTCGAG				506

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

GAATTCGGCC	TTCATGGCCT	ACTCCAGCTT	TATTATCTCA	GCTACCATCA	AACTATATTA	60
CATCAAATTA	TCATCATTAC	TCTCCTGCAC	AGTAACTTTC	TTTCTGCTCC	ACTAAGAAGC	120
TTACTCCCAT	CCTGTTTTATT	CTCTATATCG	TAGCTGGACT	AATCTTTTCA	AAGTGCAAAG	180
CCAATCACAA	TACCACCTGC	TTAAAATCCA	TCAGTGGCTA	ACTTTTCATT	CTAGGACGAA	240
AAGAAAATTC	TATAACATGA	CTTCAAAGGC	TCTGCATGTC	CTTCTATTTT	TCTTGTCTCT	300

TCTAGTCTTT TCTTTGATGG TCTCCACTCC AGCCCTACTG GCTTCTTTCT GGAATCAATG 360
 TCACCCACAA CCCGTCACGC CACTCGAG 388

(2) INFORMATION FOR SEQ ID NO:640:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 385 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

GAATTCGGCC TTCATGGCCT ACTCCGCTCT GGCCAGAAAG GAGGCCAAGA AGGACGAGCC 60
 CAAGAGCGGC GAGGAGGCGC TCATCATCCC CCCCAGCGCC GTCGCGGTGG ACTGCAAGGA 120
 CCCAGATGAT GTGGTACCAG TTGGCCAAAG AAGAGCCTGG TGTGGGTGCA TGTGCTTTGG 180
 ACTAGCATTT ATGCTTGCGAG GTGTTATTCT AGGAGGAGCA TACTTGTAACA AATATTTTGC 240
 ACTTCAACCA GATGACGTGT ACTACTGTGG AATAAAGTAC ATCAAAGATG ATGTCATCTT 300
 AAATGAGCCC TCTGCAGATG CCCCAGCTGC TCTCTACCAG ACAATTGAAG AAAATATTAA 360
 AATCTTTGAA GAAGAAGAGC TCGAG 385

(2) INFORMATION FOR SEQ ID NO:641:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 392 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

GAATTCGGCC TTCATGGCCT AGCAAGGAGA ACTATTGTCT TATGATCAGG TTTGCCATCT 60
 TTCTGTCTCT TATCATGTTG GTGGAGGTGG CCGCAGCCAT TGCTGGCTAT GTGTTTAGAG 120
 ATAAGGTGAT GTCAGAGTTT AATAACAAC TCCGGCAGCA GATGGAGAAT TACCCGAAAA 180
 ACAACCAAC TGCTTCGATC CTGGACAGGA TGCAGGCAGA TTTTAAGTGC TGTGGGGCTG 240
 CTAATAACAG AGATTGGGAG AAAATCCCTT CCATGTCGAA GAACCGAGTC CCCGACTCCT 300
 GCTGCATTAA TGTTACTGTG GGCTGTGGGA TTAATTTCAA CGAGAAGGCG ATCCATAAGG 360
 AGGGCTGTGT GGAGAAGATT GGGGGGCTCG AG 392

(2) INFORMATION FOR SEQ ID NO:642:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

GAGTTGAAGT GGCCAAAAAA TTATAACACT CTCCTACTTT CATATCTTGA TTTTAATTTT 60
 TTCCCTTACT TGTATTTTAT TTCTGAGTGG CTAATGGATC TTAGTCTAAG AACTGGAGGT 120
 GGAGAACTCG AG 132

(2) INFORMATION FOR SEQ ID NO:643:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

```
GCACAAAGAC GCATTTCATC TGAGTTTCCC TGAAAGCTAG AATAAGTTTG CTGGTGTCTAG    60
CTGGGATCCT GTCTTCTATA GCTTTGTATC AAGCAAACCTC AGCATTGTGT CTGAATGCA    120
TGTCATGTGC AGCCTGCGTT TATGTGCGAC TGAGCACTTG GGTGGGGACA TCTTAAGGCT    180
GTTTATATTT CTTTTTCATG TGTTGTGTTT GTTGTGTGTT TTGTTGTTTT GGAGAGAGTC    240
TCGCCCAAAG CTCGAG                                256
```

(2) INFORMATION FOR SEQ ID NO:644:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 447 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```
GTGCTCGCAG CCNTGGTGGC CTGGCGCTCG GCGTNCCTTG TCTGCCTCGC TTTCTCCTTG    60
GCCACCCCTGG TCCAGCGAGG ATCTGGGGAC TTTGATGATT TTAACCTGGA GGATGCAGTG    120
AAAGAACTT CCTCAGTAAA GCAGCCATGG GACCACACCA CCACCACCAC AACCAATAGG    180
CCAGGAACCA CCAGAGCTCC GGCAAAACCT CCAGGTAGTG GATTGGACTT GGCTGATGCT    240
TTGGATGATC AAGATGATGC CCGCAGGAAA CCGGGTATAG GAGGAAGAGA GAGATGGAAC    300
CATGTAACCA CCACGACCAA GAGGCCAGTA ACCACCAGAG CTCCAGCAA TACTTTAGGA    360
AATGATTTTG ACTTGGCTGA TGCCCTGGAT GATCGAAATG ATCGAGATGA TGGCCGCAGG    420
AAACCAATTG CTGGAGGATG GCTCGAG                                447
```

(2) INFORMATION FOR SEQ ID NO:645:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```
GCTCAGCAAC ATTTTAGGAA CAACATTGGT GAGTATATGA GAATAGCCGT GACCTCCATA    60
TTTCATCAGC CGGGTTTTCG TATGTATGTC ATGTGCTACC AGAATTCGAT CTTACAGGCC    120
CTCTTCCACC AGGAGACGCA CCCTGTGAAA AATGTAACT CATTAGATGT CATTTGTCTT    180
TCATTTTCGC TTTTCAGGAT GCTTTCACT TTTTACTCAT TAACCTATTG TGCTTGTCTG    240
AAAGATACTG ACTTCTACTG TGGCGTGTGT ACTGAGAGAC TCGAG                                285
```

(2) INFORMATION FOR SEQ ID NO:646:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

```

GGAGATTGGA AGAAGAATTG AATGAAAGGA TGATTCAAGC AATTGATGGG ATTAATGCAC      60
AGAAGCAATG GCTCAAGTCT GAAGACATTC AGAGAATCTC ACTGCTTTTC TATAACAAAG      120
TACTAGAAAA AGAGTACCGG GCCACGGCAC TGCCAGCGTT CAAGTATTAT GTGACTTGTG      180
CCTGTCTCAT ATTCTTCTGC ATCTTCATTG TGCAGATTCT CGTGCTGCCA AAAACGTCTG      240
TCCCGGGGCTA TCTCGAG                                     257
  
```

(2) INFORMATION FOR SEQ ID NO:647:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 296 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

```

GGGGCAGCAG TAAATCCAG GCCCGAATGG AACAGCAGCC CACTCGTCCT CCACAGACGT      60
CACAGCCACC ACCACCTCCA CCACCTATGC CATTCAAGAGC TCCAACGAAG CCTCCAGTTG      120
GACCCAAAAC TTCTCCCTTG AAAGATAACC CGTCACCTGA ACCTCAGTTG GATGACATCA      180
AAAGAGAGCT GAGGGCTGAA GTTGACATTA TTGAACAAAT GAGCAGCAGC AGTGGGAGCA      240
GCTCTTCAGA CTCTGAGAGC TCTTCGGGAA GTGATGACGA TAGCTCCAGA CTCGAG       296
  
```

(2) INFORMATION FOR SEQ ID NO:648:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 324 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

```

GTGCANATGT ACGGTGACCA CCTGGCCCTT GACCGGGCGG CTCGAACCTG GCGGCCCTGG      60
GACCAGCGTC TTCTTCTCA ACAGCCCGTT CCCCAGAATG TCCAGCCACT CTTCTGGGGC      120
CGGGGCTGGG GCGGGCTCGG GTCCTATGGC AGCAAGGAAC TCTCGGGCCA GGGCCCCAGG      180
CTGCTCANCC TCCTCCGCCG GGGGTTGTCC CATGTCCTCC AGCGGTGGCA GCTCACTCAG      240
GTCATCCTCT TCCTCCTCTT CCTCCTCCTC TTCCTCCTCA CCCTCTGCAT CCTCAACCCC      300
ATCCAGTACC TCGAAGTCCT CGAG                                     324
  
```

(2) INFORMATION FOR SEQ ID NO:649:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

GAATTCGGCC	TTCATGGCCT	ACTTCCTGAT	ACAGATACAT	TTACTACAGA	AAATTCCTT	60
TATAGGTGTA	AATTTCTGTT	TACAACAGGC	GAGTCGAAAA	ATAATAAGAA	CAAAAGGAAA	120
AAAAGCAGTC	ATACTTTATT	TTAGGCAGTT	GAGGGGTAGC	TGAATAAGTT	ATCCTGTGTT	180
GTTTGGTTCT	GTTACTTATA	GCTCAAAGTC	ATCAATATGC	CAGGGTGGCA	TGTTGGGGA	240
TGGTGCATTC	TTGTCTTTTG	CAGTCATTTA	TCAGGGTGGC	GTTTCCTAAA	TTCTAACACA	300
GACCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:650:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

GGTGACGCCT	GCTTCACATC	TCTAATGAAC	ACCCTCATGA	CGTCGCTACC	AGCACTAGTG	60
CAGCAACAGG	GAAGGCTGCT	TCTGGCTGCT	AATGTGGCCA	CCCTGGGGCT	CCTCATGGCC	120
CGGCTCCTTA	GCACCTCTCC	AGCTCTTCAG	GGAACACCAG	CATCCCAGAG	GTTCTTCGCA	180
GCTGCCATCC	TCTTCTATC	ACAGTCCCAC	GTGGCGCGGG	CCACCCCGGG	CTCAGACCAG	240
GCAGTGCTAG	CCCTGTCCCC	TGAGTATGAG	GGCATCTGGG	CCGACCTGCA	GGAGCTCTGG	300
TTCCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:651:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

GCAAGGGCAG	GCGGGTCCCC	CAGTCCCGCC	ATTACGGGTT	GTCAGACCGT	CTGCGTGTGG	60
CAGGGCTCCC	AAGGGCAGGC	GGGTCCCCCA	GTCCCGCCAT	TACGGGTTGT	CAGACCGTCT	120
GCGTGTGGCA	TTTTTTGGCT	TATAAGCTTC	ACCCACTCAC	CCCCAACCCA	CACCCACAT	180
CCCCCTGCCG	GCAGCCCCTC	AACCTAAGAA	GGGCAGAGCA	TATTTATTTT	CGGAGGGAGC	240
AGATTACTTC	TCCCAGAGAA	AGGAAAATCT	TGGAAAAGAT	TTAAAAACAC	AAATCTAAGC	300
CTTGACGGTT	TTTTTTTCCC	TTTGACCCC	CTTCCCATCT	CTTCAGAATT	TATTCCCATG	360
GCTTTTTTTT	TTCTTGTGCG	TGTTCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```

GAATTCGGCC TTCATGGCCT ACCAAATTCC CTGCCTGTGC CTGCTGGGAC CAGACTCCGC      60
TGTCATGAGG GTGACATCCG CCACCTGTGC TCTTCTGCTG GCTCTGATCT GCAGCGTCCA      120
GCTGGGGGAT GCCTGCCTGG ATATCGATAA ACTGCTTGCG AATGTTGTGT TTGATGTGTC      180
CCAAGACCTC CTGAAGGAGG AGCTTGCTCG TTACAACCCC AGTCCCCTGA CAGAGGAGTC      240
CTTCTCAAT GTCCAGCAAT GCTTTGCCAA TGTCTCGAG      280

```

(2) INFORMATION FOR SEQ ID NO:653:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```

GGTGTTTGGC CACAGTTCGG GACCTATGGT AGAAAAATAC TCAGTAGCTA CCCAGATTGT      60
AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTTCTGTTC CAGAAAGTTG GAAAAGTTGC      120
AGCAACTGCA GTAGGTGGTG GCTTCTTCT TCTTCAGATT GCTAGTCATA GTGGCTATGT      180
GCAGATTGAC TGAAGAGAG TTGAAAAAGA TGAAATAAA GCAAAAAGAC AGATTAAGAA      240
ACGAGCTCTC GAG      253

```

(2) INFORMATION FOR SEQ ID NO:654:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGGCCTCCC AAAGTGCTGG      60
GATTACAGGG GTGAGCCACC GCACCCAGCC TGTGAAATAC TATTTTATG GTAAGCTAGA      120
ATTTTAAAAC TATTTCTTGC AAGTTTAGGA TTAAATGAAT TACATTATGT AAAATTACAT      180
CTTTGTCTGT ATTACGTATT TGTATACAGT TGAATAGTTT TGGTAACACG TACCTTAGTG      240
CTTTACATTG ATTGGCTCAT TAATTTATA TTTTGAGTAA TAATCATCTA ATTTATTAT      300
TGTACAATTC AGTCTTAAAT TATGTTATGA TGTGAAATG GTAGCTTTCT TGAGTGATT      360
TATTTTGTG TAGTGGGCA ATGTAATTAT CACACATAAA ATGAACTGTG AGACTTTTGA      420
GCCTGAAATA TTATTCATAT TATAATGCTC CTCGAG      456

```

(2) INFORMATION FOR SEQ ID NO:655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

GAATTCGGCC	TTCATGGCCT	AGTATATACA	TGCATTTAAT	TGTGATTTTA	TCACCTTTCC	60
CATTTCTTTT	CCCACAAGCT	GGCATTTCAG	TAGTTGCTTT	TGAATAATGG	TTTTGGTTAC	120
CTGGGAAGGC	AGGCCAGAA	CCCATTTCCT	TGACTTGCGAG	TTCCGGGCTG	TGTTACATG	180
ACTGCTGTCT	AGCTGATGCA	TTTTTCACAT	TTGTCAACTC	TGGTTAGAAA	CAGGTCCTCA	240
GGAGTATTCT	CTAACCTGAT	ATTTTCTAAA	AAGATATGTT	GATTCAACTT	TGTTTAGCAT	300
CCTACTTTCT	AGATTGTGGG	GCTCATTTTG	CCAGGGCCAA	GCTACCAGAA	AAGTAGAAGT	360
GGAGATTACC	TGGTATGTAT	CTCTCTGGGT	GCCCCAGTTA	GAGCTGCCAC	AGCTCAGGAA	420
AAAGATGAGG	CATAACGACC	TTGAATGTAA	TTGGAGTAAG	TGACAAAATA	AGAACTACCC	480
TGGGAAACTC	GAG					493

(2) INFORMATION FOR SEQ ID NO:656:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

GAATTCGGCC	TTCATGGCCT	ACTTGGCCTT	TGTTTGTGTT	TGCCTTTGTC	AGTCTCCTGC	60
CTCTGGATGG	GTTTCTGTTT	GTTTCCAAAC	TGCTGGGGC	TGTGCACCAT	GGAGACAGTG	120
TCCTGGGCTG	CCTCTAGCCT	GATCTGGTTA	GAATAAGCCC	CTCTCCTTTG	CATGCGTCTC	180
CAACCTGACA	TTTGAGCAT	CCAAAACAAA	TCATGACATT	CCCAAGTAAA	GATAGAAACC	240
ACCGTCTCCA	CTCCACTCGA	G				261

(2) INFORMATION FOR SEQ ID NO:657:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 621 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

GAATTCGGCC	TTCATGGCCT	AGATGGTCTC	TGCTGCTCTT	GCCTCTAGTT	CATGGAGATG	60
TGTCTCTGTT	CAGGCCAAGA	TACAGCCAGC	CAGGCCTGTC	GTCTGGGACC	CAGGAGGCCT	120
CTGATGACCA	AGGGCTTTCA	CATCCTAAGT	CATTTGGAAG	GAGGCCTTGA	GAACAAAGTC	180
ACCTTTGTCA	CTCCAGTGA	ACTGAATGAG	GAACATGCTG	TCTCCTGTCT	TGGCCTCCCC	240
TTTCATGAGA	TACTGGGGAG	AAGAGAACAT	TCCTCCTGGC	TTAGTTGTAG	CAGACCCAGA	300
CCTGTGCCCA	GCTTTGGTCC	CCCTTCCCAA	CTTCTGAAGC	ACGTGCTGCA	GAGCCACCTT	360
GGTCTGAGCA	CCTGAGGACC	AGCCCCCTCCT	CCCTCAGTGC	GGGTCACTC	TTGGGGGATT	420
TTCTTAAAGT	GAAGAAAGGG	GGTGGGGAAC	CATATTGCCC	CTCCCTCCCC	CATCAAACCTT	480
CCTTCATTTA	ACTTGCTATA	AAATGAGTCA	TATAAAGAAA	CTCTATATGG	GTGAGGTATA	540
TCCCACTTCT	GTGAAAACAT	TACAAATCAA	ACCGCTTCTC	TCAGTTTATT	TAAGATGCTT	600
TTGTTGCAAG	CGGTACTCGA	G				621

(2) INFORMATION FOR SEQ ID NO:658:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 567 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

GAAGTCTTGG	AGATTCTTAG	TTTATTCATT	AACAGCAGAA	GGATGGAAGA	AAATTCCTCT	60
GGCAATACCA	TGTCAGCCTC	TTCGATGTTT	AATACAGAAG	AAAGAAAAATG	TTTGCACT	120
CACAGAGTCA	CGGTGCATGG	GGTCCCAGGG	CCAGAGCCCT	TTACCGTTTT	CACTATTAAT	180
GGAGGCACCA	AGGCAAAGCA	GCTTCTGCAG	CAAATTCTGA	CAAATGAACA	AGACATCAAA	240
CCTGTTACCA	CAGACTATTT	TTTGATGGAA	GAAAAATATT	TTATATCTAA	AGAAAAGAAT	300
GAATGTAGGA	AACAACCATT	CCAGAGAGCC	ATTGGTCCAG	AAGAGGAGAT	CATGCAAATT	360
TTAAGCAGCT	GGTTTCCAGA	AGAGGGATAC	ATGGGCAGGA	TTGTCTTAA	AACCCAGCAG	420
GAAAAACCTAG	AAGAGAAAAA	CATTGTTCAA	GATGACAAAG	AGGTGATCTT	GAGCTCAGAG	480
GAGGAGAGTT	TCTTTGTCCA	AGTGCATGAT	GTTTCTCCAG	AGCAACCTCG	AACAGTCATC	540
AAAGCACCCC	GCGCCAGCAC	ACTCGAG				567

(2) INFORMATION FOR SEQ ID NO:659:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

GAATTCGGCC	TTCATGGCCT	AGGCCCTTTG	GCCCTGGGGT	GGGGGTGCTT	ACTACATCCC	60
TGGAAGGTGC	AGGGAGGCTG	ATGGCCTTGA	TCTCTAACAC	AAACAGGAAC	CAGCTTCCTC	120
CCTCCCCCA	CCTGGGTTCC	CAGGGCCTCC	GGGTGTGAGA	TCCTCCCCCA	CTGCAGTGCC	180
CCACCCGCTC	CCCACAGAAG	CCCGGAGAGT	GGCTCTGTCA	CCAGAGGTGT	CATTTCCAG	240
CTGTCTGTGG	GAGGTGAGTG	AGCAGGGAAT	GTGTGTGCTG	GGTGTGGGAA	CTCAGCCCAA	300
TCTAAGAGAA	GATACTCTTG	GCTTCCTCCC	CCTCAGAGGA	GCAGCCGCGT	CCCTGTCTCT	360
TGTGCACTGA	CAGTCCCGGA	GTCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:660:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 491 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

GAATTCGGCC	TTCATGGCCT	AGCCAGGAGT	TGAGGTGGAA	GTCACCATG	CAGATGCTTA	60
AGTCAACTAT	TTTAATAAAT	TGATGACCAG	TTGTTAACTT	CTGTTGGTTT	TTATTCAGAA	120
TACTGGCAGA	TTTAGGAAT	ATAAAGGTGT	ACTATGAGAC	TTCCACTTTT	CAGGTGGAAT	180
ATATGGGTAT	CTTAGAGTGG	TCTATCCTGT	TTTCGTTGTC	GTTTGAGTCA	TTTGAAAACT	240
GGATTCCGTT	AACTACATAA	TATGTGAGAC	CTGACTGGTT	TTATTGGACA	CTGGCAGTTT	300
ATAACTTTGG	CATACTCTAG	ATAAATTCTG	ATTGGTATGG	GGTGTTAAGG	TTTCTGGGGC	360
GTTTGTAATG	CACACCCATG	GTTGAGAAC	TAGTGCGCTA	GTAGGCACGT	GTAAAAAGC	420
TAGTAATAA	TATTTTAA	TTAACCAAGT	TTAACGTCCT	TAAAAAAGGA	TTAAGTGGCA	480
AGGACCTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

```

GAATTCGGCC TTCATGGCCT ACCTCAATAT GCTATCAGAT TCTGAAAATT CCCAGCATCT    60
GGAACCTTCAT GAGCCACCAA AAGCTGTGGA TAAGGCGAAA TCCCCAGGGG TTGATCCTAA    120
GCAGTTGGCA GCAGAACTCC AGAAGGTTTC ACTACAGCAG TCACCGCTGG TTCTGTCATC    180
AGTTGTTGAA AAAGGATCTC ATGTTTCATC AGGTCCTACA TCAGCAGGAT CCAGTTCCGT    240
TCCCAGCCCT GGGCAACCAG GGTCCCCCTC AGTGAGCAA AAGAAGCACG GCAGCAGCAA    300
GCCACTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

```

GAATTCCTAT GGCCTACTTC CGGCGCAAGT GGCTTCTGAT AATCATGGCG CCCCTCGGAA    60
CAACTGTATT GCTGTGGAGC CTCTTGAGGA GTTCTCCGGG CGTGGAACGG GTCTGTTTCC    120
GGGCTCGAAT CCAGCCCTGG CACGGTGGCC TGCTCCAACC GCTACCTTGC TCTTTCGAGA    180
TGGGGCTGCC ACGCCGCCGG TTCAGCTCCG AGGCCGAGA ATCTGGTAGC CCAGAGACCA    240
AGAAACCTAC ATTTATGGAT GAGGAAGTTC AAAGCATACT CACGAAAATG ACAGGCTTGA    300
ACTTGAGAA GACTTTTAAG CCAGCTATAC AAGAACTGAA GCCACCAACC TATAAGCTAA    360
TGACTCAGGC ACAGTTGGAA GAGGCTACAA TACAGGCTCT CGAG                                     404

```

(2) INFORMATION FOR SEQ ID NO:663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

```

GAATTCGGCC TTCATGCCTA ATTTGTGTGA TGGCCAAAGA GTTCTTATCA GAAGTGCCAA    60
AAACTACATA CAGGTTGGCT TCCAATAACA TGAGCCAGGT ATTTTTCAGT AATATTTTGA    120
AGTGTCTTTT CTTTCTAGAC ATGCACATGA TGGTGCCAA GCCAGAACAG TGGGTAAAGC    180
CAATGGCTGT AGCAGGAGCC AATCAGTACA CCTTTCATCT CGAG                                     224

```

(2) INFORMATION FOR SEQ ID NO:664:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

```

GAATTCGGCC TTCATGGCCT AGGTCTACCA AAGTGAGGAC ATTACTGCAG ATATTCTTCT      60
CCTTTTCTCC TACATTATCA TTTCTCTTTT ATAACATCAT TTCTGCAGAT ATGTAAAAAT      120
ACATCCCATC TTCAAAAAGA AAAACAAAAA TCTGACTGTA CTTCATATCC CCTTCTAGAC      180
ATTGCCACAT TTCTCTACTT CTGTTTACAA CAAAACTCCT GGAAAGATTT GTCTATACTG      240
GCTTTCTCTA CTTCTTTTAC TTCCATTCCCT TTCCTAACCA CTCTAAACAT GCTTGGGTCC      300
CCACCACTGT AACAAATATA ATTTGTGTCC AATAACCAGT GATCTCTGTA TCACCGGTTC      360
CAAGGGTGAG ATCTCAGACT TCACCTTTCT GGATTGATTG ACACATTGGA CTCAGTTGGT      420
TACTCTCAC  TTCTTGAAAC TGTCTTCACT GGGCTTTTTC GACTCCATAT CTCGAG      476

```

(2) INFORMATION FOR SEQ ID NO:665:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 238 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

```

GAATTCGGCC TTCATGGCCT ACTCTCTACT CCTTTGTGCT CAATTTCCAT TGTGGAATTC      60
TGCATATATG ATCTTGTGGC ACATTTCTAC ATTTCCCTCAG CCCAGAAGGC CTTCCCTGTT      120
CACTATCTCC TTCTTTTAC TAACCTTTAC TATATTCCA GGCACAGTTC AGGCATCAGA      180
TAGCCCTATT TGTTCCTAAT TTCACCGTAG GTCAGATTAT AAGCCTTGCA ATCTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:666:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 361 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

```

GAATTCGGCC TTCATGGCCT AGACCATTTT CATTGTTTAT AGTTTATTTT TTATAAATAG      60
TGCTTTCTGG AATATCCTTA AATACCTCTA TCTTTTAAAC ATCCTTGTGT ATACATCTTT      120
TCTCACACTT GGCTTCCTCT TGAATAGAA TCTCCTGGAA ATTAGATAGC TGAGGTAAAA      180
GTCCCTGAAC CTTTACAAA TTGCTACACA ATAAATACCA AACTGATTTT CAGGAATGTA      240
GTCCCATCAA CAGTGTGCTT GTTTATCCAT ATCGTTGCTG ATCTGAGTTT TGTCACTCTA      300
TTGATTCTTA CCAATCTGCC AGTATCATAG ATTTTAAAT ATTTTTGTG TGCATCTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:667:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 343 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

GAATTCGGCC	TTTATGGCCT	ACTCATACAC	AATGAATACA	AAAACTGGAA	CTCTGCAATT	60
TAATACTGTT	TCCAAACTGG	ACACTGGAGA	ATATTCCTGT	GAAGCCCGCA	ATTCTGTTGG	120
ATATCGCAGG	TGTCTGGGA	AACGAATGCA	AGTAGATGAT	CTCAACATAA	GTGGCATCAT	180
AGCAGCCGTA	GTAAGTTGGG	CCTAGTGTAT	TTCGTTTGT	GGCCTTGGTG	TATGCTATGC	240
TCAGAGGAAA	GGTACTTTT	CAAAAGAAAC	CTCCTTCCAG	AAGAGTAATT	CTTCATCTAA	300
AGCCACGACA	ATGAGTGAAA	ATGATTTCAT	GCACACCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 266 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

GAATTCGGCC	TTATCCTACA	ACTTTGAATA	GACATAAGAG	TGCCTGTCTG	CATAAACCTT	60
CATCAACATT	GGTATTATCT	TTCTTTTCA	TCTTTGCTAA	TTGGATAAGT	TTTAAAAAGT	120
GTAACACATT	TTAGTTTGCA	TAGCTTTGAT	TATAAGTGAG	GTTCGACATT	TTTTTTCATT	180
TCTTTACACT	TTAAAAATC	TAACCGTGGC	AACGTTTGCA	GGTGTGTGTT	CTTCTTATGT	240
TGCTGAGTGT	TATTTACTCC	TGGACG				266

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 452 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

GAATTCGGCT	TCATGGCCTA	CAAAAAAGAA	ATTAAGAAGC	TCCTAAAGAC	GCAAAGAAAT	60
CATCTACTCC	TCTGTCTGAA	GCAAAAAAAC	CAGCTGCTTT	AAAACCAAAA	GTACCCAAGA	120
AGGAAGAGTC	TGTCAAGAAA	GATTCTGTTG	CTGCCGGAAG	GCCAAAGGAG	AAGGGGAAAA	180
TAAAAGTCAT	TAAGAAGGAA	GGCAAGGCCG	CAGAGGCTGT	CGCTGCAGCT	GTCGGCACTG	240
GAGCCACCAC	AGCAGCTGTC	ATGGCGGCAG	CTGGAATAGC	AGCCATTGGC	CCTGCCAAAG	300
AACTCGAAGC	TGAGAGGTCC	CTTATGTCAT	CTCCTGAGGA	TCTAACCAAG	GACTTTGAAG	360
AGTTAAAGGC	TGAAGAGGTC	GATGTAACAA	AGGACATCAA	GCCTCAGCTG	GAGCTAATCG	420
AAGACGAAGA	GAAACTGAAG	GAAAAACTCG	AG			452

(2) INFORMATION FOR SEQ ID NO:670:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 284 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

GAATAATTGA CTGAAAGTGT AGTGTGAGT GGTAGAATAA GTGCTGATCC TGGGGTCTTA	60
TACCAATGTT GCTAACTGTG AGCAGCCTTT GTCAAATCAC TTGGCTTCAT TTTCAGTGGC	120
CTAAGAGTAA TAGGTTTAAAT TATTTCCATA ATTCCTTTAA GTTTTTACAT TTTCTGAGTT	180
CATCTTTTGT GTTTTTCCTG GCATTTTACT ATTCCTCTTT CCTGCTTTTG GCTATTTTCT	240
CAACAGGTCC ACGACTGGAA TTTGAAAGCA AGAAACATCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:671:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 235 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

GAATTCTGGA AGCAGCCTAT CATCGCTCCG TCTGCCCTCC ATACACAGCG TTTGTGTGTG	60
TTATGCCAAA CTGCTTGGTG TTTTCCAACC GTGGACCATG ATATCTCACT TCCTTAACCT	120
TACCTTCATA TGCTTTTCCT TTGTGTCTTC TTCTGAAATG CTTCTTCCTT TTGTCCAGGC	180
TGACTCCTGT TTGTCTGAGA CATGTGTCTC AGGAAGCCTT TCCGTTCCCC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:672:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 370 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

GAATTCGGCC TTCATGGCCT AGCATTGATG GCCCATGTAG AAGACCTGAT CATTAAAGACT	60
ATAATCTCTG CTGAACTAGC TATTGCTACT GCCTGTAAAA CCTTTGTTCC TCATCGCAGC	120
AGTTGTTTGG AACTCTATGG CTTTGACGTG CTCATAGATT CTAATCTGAA GCCATGGTTG	180
TTGGAAGTGA ATCTCTCTCC TTCTTTGGCC TGTGATGCGC CTCTGGACCT AAAGATTAAA	240
GCCAGTATGA TTTCAGATAT GTTCACTGTT GTAGGATTG TGTGCCAAGA TCCTGCCAGC	300
CGGGCATCAA CTCGGCCAAT TTATCCACCC TTTGAGTCTT CCAGGCGAAA CCCTTTCCAG	360
AAACCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:673:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 295 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GAATTCGGCC	TTCATGGCCT	ACACAGACAT	CATCATGCAG	AAGATGACCA	TTTCCAACAT	60
GGAGGCAGAT	ATGAATAGAC	TCCTCAAGCA	ACGGGAGGAA	CTCACAAAAA	GACGAGAGAA	120
ACTTTCAAAA	AGAAGGGAGA	AGATAGTCAA	GGAGAATGGA	GAGGGAGATA	AAAATGTGGC	180
TAATATCAAT	GAAGAGATGG	AGTCACTGAC	TGCTAATATC	GATTACATCA	ATGACAGTAT	240
TTCTGATTGT	CAGGCCAACA	TAATGCAGAT	GGAAGAAGCA	AAGGAAGTAC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GAATTCGGCT	TCATGGCCTA	CCTGCCTCGA	GTGATGGGTA	TCGGGATGGG	TATCGGGATG	60
GCCACGCCC	GGATATGGAT	CGATATGGTG	GCCGGGATCG	CTATGATGAC	CGAGGCAGCA	120
GAGACTATGA	TAGAGGCTAT	GACTCCCA	CTCGAG			156

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTCGGCC	TTCATGGCCT	AATAATTGT	AAGTTAAAT	AAGTAATACA	AATTAAATGC	60
AAATCAAATG	CCTGAAGAAG	AAGCACGAAT	ACCTATTTG	AAATCTGCTG	TAGCCGAGAC	120
AGCTTCTAAA	TCTCCCACTT	GGGTTCTGTT	TCTGGAAGGT	GTGGGTCTCTG	TGGTAGCTGG	180
AGTGTGGTG	GCCATCTTGG	TGCTGGCGGT	CCTCATGCTG	ATGTACTACT	GCTGCAGACA	240
GAACAACAAA	CTTGGCCAAC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

GAATTCTGGA	TCAAAACAGA	GGAAAATGGT	GGGAATTCTT	GTATAGATAC	AGTCTAACAT	60
AGAAACCCAT	GCCCATCAGC	AGTAATTTCC	AGTCCCCCAG	TCCTCCAAGC	CCTGGTACTC	120
GAG						123

(2) INFORMATION FOR SEQ ID NO:677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

```

GAATTCAGAG ATAAAGCTAA AGTTCATTT GAGCACCAGC CCAAATCCTG GACTTCTTTC      60
TGCTCCTCCT CAGAGGTTCT CTGGTTATAA GTTTATGTG TATCTGCCA GAATTTTTC      120
TATGTTATTA ATACAAATAT ATGTAGCCAC AGAAATTATA GCGTGTCATT CAGCCTTTGG      180
TTTTATTGCG ATTGATAGTA TTATGTCCAT ATCACTCTAC AACTTCTTAG GCCATGAAGG      240
CCG                                     243

```

(2) INFORMATION FOR SEQ ID NO:678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACC ACCTATGGAA GCCAAGTGTT CCCGGGCCAT      60
GAGACCTGCC CAATCAAGCA GAAACACATT TGGAGAGACA AACAATCACG ACACGCTCGA      120
G                                     121

```

(2) INFORMATION FOR SEQ ID NO:679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

```

GAATTCTAGA CTGCCTCGA GTACCTGATC TTTTACTGTC TCTATAGTT CATCTTTTTC      60
TTCCCTTTGT TAATTCTACT TTTTAGTTTT TTTGCTAGAT TTTTCTTGCA ATTGGATAGG      120
CCCATTTAAC CTATTTTGCC TCCACTCTAA ATTCAGTACT CCAAGAATTG GTTTCACCTCT      180
TCCAAATTTT GTATATAAGC CAGAGTTCTG CATAAAGGAA AATACTTAAA TTCTTTCTAA      240
TCTAATGTGG TTTCTGTCAT CTTTCAGGAA ACTTTTCTCT GAG                         283

```

(2) INFORMATION FOR SEQ ID NO:680:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

GAATTCGGCC	TTCATGGCCT	AGGGTTTGTG	GCTAAAAATT	ATGCTTAAGA	ACACATCTAA	60
CAAACCTAAA	GCTGCAAAGA	CATAATGTTA	ATGTAGGTGA	AAATTTCACT	TGTGTTTATT	120
CTGATAGACA	AAATTGTATT	TTAGATGAGA	AGCAACAATT	TTCATGTTGT	ACTGAGATTG	180
TTAGTAATGA	AATACTTCCA	AATATTAGTG	ATGGTAGAAA	TCTAGTGTAG	GGCTCTTTGC	240
TGAGAAGGGA	AAAAAGTCAC	ATAAGAAATC	TACTTTTCAG	TAAACTGCAA	ATATGTGTGC	300
TTCAACCTAT	AACATATTCT	GTCACTTTGA	GCTTGTCTATA	TTGACAGAGA	ATGAAACTT	360
GATAAGACTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:681:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

GAATTCGGCC	TTCATGGCCT	AGAGCGACTT	CGACACCATG	CCAGACATTG	AGAGTGATAA	60
AAACATCATC	CGGACCAAGA	TGTTCTTTA	CCTGTCAGAT	TTGTCCAGGA	AGGACCGGAG	120
AATGTGCAGC	AAAAATATA	AAATTTATTT	TTGGAACATC	ATCACCATTG	CTGTGTTTTA	180
CGCGTGCCCC	GTGATCCAGC	TGGTCATTAC	CTATCAGACA	GTAAGTGCTA	AACCTAGCCC	240
CAAACCCCTC	GAG					253

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

GAATTCGGCC	TTCATGGCCT	AATCGAGGAG	AATGGAGACC	AAACCTGTGA	TAACTGTCT	60
CAAAACCCTC	CTCATCATCT	ACTCCTTCGT	CTTCTGGATC	ACTGGGGTGA	TCCTGCTGGC	120
TGTTGGAGTC	TGGGGCAAAC	TTACTCTGGG	CACCTATATC	TCCCTTATTG	CCGAGAACTC	180
CACAAATGCT	CCCTATGTGC	TCATCGGAAC	TGGCACCACT	ATTGTTGTCT	TTGGCCTGTT	240
TGGATGCTTT	GCTACATGTC	GTGGTAGCCC	ATGGATGCTG	AAACTGTATG	CCATGTTTCT	300
GTCCCTGGTG	TTCTTGGCTG	AGCTCGTAGC	TGGCATTTC	GGGTTTGTGT	TTCGTCATGA	360
GATCAAGGAC	ACCTTCCTGA	GGACTTACAC	GGACGCTATG	CAGACTTACA	ATGGCAATGA	420
TGAGAGAATG	CTCGAG					436

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```
GAATTCGGCC TTCATGGCCT AGTCCCCACT TTATCTCTTT AAACGGTTTC TTTTCTCTTT    60
TTTTTTTTTA GACCTCTCAG GGATGAAACA TTTTATTTT TAAACTAGTT TTTTCTTAA    120
ATAACATTAA CACATGCTGA ATGCTTAAAT CTTTTTAGAA TTCAGAAAGG TAAATGAAA    180
GTCACCATTC TCATTCTCAT CATCTTACTC CCAGAGATGA TTGTTATTAA TATTCCAGA    240
AATTTTGCTT GTATATGCAA ACAGCAATAT ATTGTAGCTG CTCGAG                286
```

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```
GAATTCGGCC TTCATGGCCT ACCCTTACCA GATACTGAAT CTGCCAGTGC CTTATTTTGG    60
ACTTCTCAGC CTCCTGGGCT GGGTGAGGTG GTTCACTACC AGCCTTGGCA CCATAGTGAG    120
ACTCCCATCT CTACAAAAA AAAAAAAAAA AAACCTTCTG TTGTTTGTA GCTACCCAGT    180
TTATGGTATT TTGTACAGC AACCCAAACA GTCTGAGACG TTAGCTTAA CTCCTGTATG    240
CACTAGATAC AGTCTGCACT TTGACATCAA TCTCGA                276
```

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```
GAATTCGGCC TTCATGGCCT ACTAAGAATA GGAAAAAAAA TAACACTATG ATACCACAAC    60
CTTATTACAT CAAACTGCTT TGGGCTTTAT CCTCTTAAA GTGTGCTCAG GTGTTGAGCC    120
ACGAGTTTC TGACAGCCCT CATAAGACCT TCGAG                155
```

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```
GAATTCGGCC TTCATGGCCT ACTTTGAAGA GTACGATTTC AAAACCAGCA ATTGGTGTGA    60
ATGCCAAAAC ATTTGTTGGC ACCATTTATT TAAAAA AAAAGCTGTA TGCAGCAGAA    120
```

```

AGCCTTATAC AAGTTGTTTT TCTTTTTTTC CTTTTTCTTT TTTTGGTAC CTCATTCT 180
GTTACTTTTA TATAAATTC TCTGCAAAGG AAGGCCTCTC TTTGGACTAC AATTGGAGG 240
CAGCCAATTG TTGTGCCTGC TTCTGTAAA GAATGTGGAT ATCAAGCCCC CCCGACTCGA 300
G 301

```

(2) INFORMATION FOR SEQ ID NO:687:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 254 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC TTCATGGCCT AATTTTTTACA GAAATTATTT CCACAATCAG AAGTACTGTA 60
CTGATTGCAT TTCTTTGTCT CAAAAAGTTT TCCTTATGTT TCTCAAAGCA GTATTACAC 120
TAATTATTCA ATTCTTATCT TTCTTTCAGT TTTCTCCAAT AGACTGTGAG ATCTTTGAGG 180
GCCAGGTTGA CATGTCTCTG ATACCTACAC CCTATGCAGC TCCTAGTGCA GGACCTGCA 240
GTGACAAGCT CGAG 254

```

(2) INFORMATION FOR SEQ ID NO:688:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC TTCATGGCCT AATATTTATT TAGATGCTAT TATTACTGTT TGGACTTTTA 60
TTTTGGCAGG CTTTGTTCCT GACTGTAGGG TTTTCCAATG TGAATAATGA CCACTCCTGC 120
CTCTCCCGTG GTGTATTTTG GGCACCTTCC CACCCGGCTG CATACCCGGC CAGGGCTCCC 180
ACAGAGACAA GGAGGGCACA GGTGTCTGCC CCCTCTTTGA AATCGATATA CACACATCCA 240
CGCACATGCG GCCCACTCGA G 261

```

(2) INFORMATION FOR SEQ ID NO:689:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 214 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCTAGA CTGCCTCGA GCTTCTGGCT GTTGTCTTTG CTGGGCATCC TTTTACAAG 60
TGGAAGAACT AGGATGGCTT TCCAAAGTCT TCTAGAAATG AAGTTCTTTC TCTGTGCAGC 120
TTTCCCCCTT GGAGCAGGAG TGAAGATGTT TCATTATCTT GGGCCTGGGA AACCACTTCC 180
CCAGGCTTCT CCTCCCCC ACCCCGACT CGAG 214

```

(2) INFORMATION FOR SEQ ID NO:690:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 307 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```
GAATTCGGCC TTCATGCCTA CAAACTTAAA AGTAAATCTT TGGAAATCAG ATAGTAGTCT    60
TGAAACTATG GAAAACACAG GAGTGATGGA TAAGGTTTCAG GCAGAGTCTG ATGGGGACAT    120
GTCTTCAGAT AATGACTCAT ACCACTCTGA TGAATTCCTT ACAAATTCTA AGTCTGATGA    180
AGACAGGCAG CTAGCTAACT CATTAGAGAG TGTAGGGCCA ATAGATTACG TTCTTCCTAG    240
TTGTGGTATT ATTGCCTCAG CGCCTCGATT GGGCAGTCGG TCCCAGTCTC TTAGCAGCAC    300
ACTCGAG                                         307
```

(2) INFORMATION FOR SEQ ID NO:691:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 493 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```
GAATTCGGCC TTCATGGCCT ACTCCATATT TATTTAGATG CTATTATTAC TGTTTGGACT    60
TTTATTTTGG CAGGCTTTT TCCAGACTCT AGGGTTTTC AATGTGACTA ATGACCACAC    120
CTGCCTCTCC CGTCGTCTCT TCTGGGCACC CTCCCACCCG GCTGCATACC CGGCCAGGGC    180
TCCCACAGAG ACAAGGAGGG CACAGGTGTC TGCCCCCTCT TTAATTCGA TCTACACACA    240
TCCACGCACA TGCGACCCCG AGGAAACGAA ACCCACTCTA GAAAACGCGA CCTTGGCCGC    300
ACCTAAAGCA GCCAGCCGTG AGTGCAGACC CCTTGGCCAG CGTGGCGCAG TGGCCCTGAG    360
CAGTAGTGGC GTGTGTGTAG ATCAAGTCGG ATCTAGTCCA GCTCGGTTCA TTAGCGATCC    420
ATGTAATCTG ACGTCATCTT GTCTCGAAGT CTCTTTT TTTT GGCCCAGGCC TTGAAGAATA    480
CACTGGACTC GAG                                         493
```

(2) INFORMATION FOR SEQ ID NO:692:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 225 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```
GAATTCTAGA CCTGCCCTG CCTCCTGCAT CCAGCCCCCA ACATGGTGCC AAAGCTTCCA    60
GAAGCCAAAA AGCTTCTGAT TTTTAAGGTA GTGGGCATCT CTCTCCTAAT GACGAAGCTG    120
CTCAGCAACT CCACCTGCCC GCCGAGGAA GGAGCAGTCC CCTGCTATCC CTGCAGCCAC    180
TCCCAGCACA CCCGCACACA GCCAGCACCA CCGCCCACTC TCGAG                                         225
```

(2) INFORMATION FOR SEQ ID NO:693:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```
GAATTCGGCC TTCATGGCCT ACTGGCTCAT ACAATACATC AATAAGTATG CAACTTTTCA      60
TTTGTATTTT CGTTGCTGGA AGTGGGAAAT ACCCCATCTT CCCAGGAGTG AAATGGTTCT      120
ACTTTCCTCTC CGTGGTGCCC TGTATCATT A CTCAGCTCTG CTGCTGCTCT CCGCAGCCCC      180
TAAAGTAGC ATGGATCGGG GAAGAAGGAA GGACGGCAGG AAGGCAGGCA GAGATCCTCA      240
GGCAGGTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

```
GAATTCGGCC TTCATGGCCT AGTGTGTGTG TGCCTGTGTG TGTGTTTACA TATAAAGTTT      60
TTTGGTAACA AATAAATTTT GTTAGAGCTA GTCAGATTTT TGTTTGCTTA ATCTGCTAGT      120
TTTGGTAGGT TATATTTTTC AAGGAATTTG TCCATTTTAC CTATGTTGTT GAATTTTGGG      180
TGTAACGTTT TTCATTACTC TTTTCTTTT AATATCTGTG GGATCTGTAA TGATGCCCCC      240
TCTTTCATTC CTGATATGAG TAATCTTAT TCTCTTTTG TCTATCAGCT CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

```
GAATTGGCCT TCATGGCCTA ATTGGGACCA AATAGAGGCT CACAGATATT TGGATTATTT      60
TATGTGCTTA TTATTAAATA AGGAAAGCAT TTTGTGATAT GTGGAAGACG CTATGTGAAG      120
TTTTACCTAT CTCTCAAAG ACCTTTTCTT TGTAATTTT TTTTGGTGTT TCTTAAAGCC      180
AAACAAAGAA ATGTTCTTAA GGAGACAGGG TGGGTTTTTC TGTGGGCTTA GGCCATGAAG      240
GTCGAG                                     246
```

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

```

GAATTCGGCC TTCATGGCCT ACCCTAATAT AAAAAGCATT GTCACCATGT TGATGCTGAT      60
GCTATTGATG ATGTTTGCTG TCCACTGTAC CTGGGTCACA AGCAATGCCT ACTCTAGTCC      120
AAGTGTAGTC CTGGCCTCAT ACAATCATGA TGGCACCAGG AATATCTTAG ATGATTTTAG      180
AGAAGCTTAC TTTTGGCTAA GGCAAAATAC AGATGAACAT GCACGAGTAA TGTCTTGGTG      240
GGATTATGGC TATCAGATAG CTGGAATGGC TAATAGAACT ACGTTGGTGG ATAATAACAC      300
CTGGAATAAC AGCCACATAG CACTGGTGGG AAAAGCTATG TCTCTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

```

GAATTAAATA AGTTACTGAC TTTGTGACTT ATTTAATTCA TATTAATATA TTAGGCTTCC      60
CAACTGACGG TGTTCAGTT GAGCTAGCTT CCAGTTTGG AGAAACACAT AGTTGATTAG      120
TTCTGTCACT AATTTTCAGG GATATTAATA TAACTTTGAT ATTAGTGAGA AATTTTCTTT      180
CAGTAGTAAA ATGTTTTCTA ACTTAGGAGC TGTTCTCGAG      220

```

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

```

GAATTCGGCC AAAGAGGCCT AGCAGAGCTT TCATATCCAC GATGCGTTTT CTGGCCGCCA      60
CGATCCTGCT GCTGGCGCTG GTCGCTGCCA GCCAGGCGGA GCCCCTGCAC TTCAAGGACT      120
GCGGCTCTAA GGTGGGAGTT ATAAAGGAGG TGAATGTGAG CCCATGTCCC ACCGATCCCT      180
GTCAGCTGCA CAAAGGCCAG TCCTACAGTG TCAACATCAC CTTTACCAGC GGCACTCAGT      240
CCCAGAACAG CACGGCCTTG GTCCACGGCA TCCTGGAAGG GATCCGGGTC CCCTTCCCTA      300
TTCTTGAGCC TGACGGTTGT AAGAGTGGAA TCAACTGCCC CAGTACAGTC GAG      353

```

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

GCGATTGAAT TCTAGACCTG CCTCGCTTCC CCACCCTTAC TAACATTAAC GAAAATAACC	60
CCACCCTACT AAACCCCATTT AAACGCCTGG CAGCCGGAAG CCTATTGCA GGATTTCTCA	120
TTACTAACAA CATTTCCTCC GCATCCCTT TCCAAACAAC AATCCCTCT TACCTAAAC	180
TCACAGCCCT CGCTGTCACT TTCCTAGGAC TTCTAACAGC CCTAGACCTC AACTACCTAA	240
CCAACAACT TAAATATAAA TCCCCACTAT GCACATTTTA TTTCCCAAC TCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

GAATTCGGCC TTCATGCTTA GCCTCAGCTC TTTCTTCTGG GTTGTTTGTA TTTTCTTTTC	60
TGTCCCAAAC AGTTTCCCTCC ACAAAGAGAA CTTTATGTCT TTCTCTGTCT TCCCTCAGTC	120
CTTCCAGTCA GCAGCCTGTG ATTGGGCTTT TCCCTCAGA AACGAACAAT CCAGAACCCA	180
CTGTTTAAAA CAACTGTATT TTGCCTTGGG AAGTCCCATT GCCTTCCCTG AAAACATTAA	240
ACATTCTCTC GATCCCCAGC CTGAGTCTCT CTGTCTCTGG GCCCATCCT GCTCCACAGC	300
AGGGCTGGTG TGTCCAGCAC AGAGTGACCC TCCGATGCCC TTTCCACCC GCCGCCCTGC	360
CTCCCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

GAATTCGGCC TTCATGCGCT AGGAAAGATC TAATTATCAT GGACCTGCGA CAGTTTCTTA	60
TGTGCGCTGTC CCTGTGCACA GCCTTTGCCT TGAGCAAACC CACAGAAAAG AAGGACCGTG	120
TNCATCATGA GCCTCAGCTC AGTGACAAGG TTCACAATGA TGCTCAGAGT TTTGATTATG	180
ACCATGATGC CTCTTTGGGT GCTGAAGAAG CAAAGACCTT TGATCAGCTG ACACAGAAG	240
AGAGCAAGGA AAGGCTTGA AAGATTGTAA GTAAAATAGA TGGCGACAAG GACGGGTTTG	300
TCACTGTGGA TGAGCTCAA GACTGGATTA AATTTGCACA AAAGCGCTGG ATTTACGAGG	360
ATGTAGAGCG ACAGTGGAAG GGGCATGACC TCAATGAGGA CGGCCTCGTT TCCTGGGAGG	420
AGTATAAAAA TGCCACCTAC GGCTACGTT TAGATGATCC AGATCCTGAT GATGGATTA	480
ACTATAAACA GATGATGGTT AGAGACGTTT TCGAG	515

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

```

GAATTCGGCC TTCATGGCCT AGGGGACCTG ACGTTCACTG TGGCCCAAAA GATGGCTGAG      60
CCAGAGAAGG CCCAGCCCT CAGCATCCTG CTGTACGTGC AGGCCTTCCA GGTGGGCATG      120
CCACCCCCTG GGTGCTGCAG GGGCCCCCTG CGCCCCAAGA CACTCCTGCT CACCAGCTCC      180
GAGATCTTCC TCCTGGATGA GGA CTGTGTC CACTACCCAC TGCCCGAGTT TGCCAAAGAG      240
CCGCCGCAGA GAGACAGGTA CCGGCTGGAC GATGGCCGCC GCGTCCGGA CCTGGACCGA      300
GTGCTCATGG GCTACCAGAC CTACCCGCAG GCCCTCACCC TCGTCTTCGA TGACGTGCAA      360
GGTCATGACC TCAAGCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

```

GAATTCGGCC TTCATGGCCT AGCTCCACTT TCTCTGAAAA TTTATTCTATA TTGTTAATTA      60
AATTGTTTT TATTATAGAA ATAATATATT GCATGATTG TAAAAATGCA GAGGAACAGA      120
ATGGCACAAA ATTATGTAAC CCTTCTATC TCCCCTTGGT GTACCTCCTT AATCATACTT      180
CTCAGAACCA TTGTCAATAA TTTGCTGGA GTTCTTCTGA TGGTTACCAT CGTGA CTGAT      240
AGATTTATT CCCAGGTTCA AGCGGTTCCC CTGCCTCAGC CTCCCAGTA TCTGGGACTA      300
CAGGCATGCA CCACCACTCA GTCGAG

```

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

```

GAATTCGGCC TTCATGGCCT TGCCTTTTTT CTTCACCAC TTTACTACAC ACAATTACTG      60
GATTAATCTC TTTAATGCCG AGATCTTTTT TCCTTAGTGA CACCTTAATC ACTCTTAGCT      120
TAACATATAT GGTATCCAT TACTGGGTTG CCTCTGCCTT TCCAGGATTG GCTGCCACTG      180
CTCCTCCACA TACCCTGTAT TCTAGCCAAA TGGAATCACT GCTGTGTCCC AAGCAGATTC      240
TTTATTTCTC TTGGCTGTTG CTCTCTATTT CTAATGCTAC CTGCCCTTCA AAACCTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

```

GAATTCGGCC TTCATGGCCT ACTTGATTG TGGCTTATCT CAAGTTACCA TTTTTCAGTC      60
AAGTCTGTTT GTTTGCTTCT TCAGAAATGT TTTTACAAT CTCAGAAAA AATATGTCCC      120

```

```

AGAAATTGAG TTTACTGTG CTGTATTG GACTCATTG GGGATTGATG TTTACTGCACT 180
ATACTTTTCA ACAACCAAGA CATCAAAGCA GTGTCAAGTT ACGTGAGCAA ATACTAGACT 240
TAAGCAAAAG ATATGTTAA GCTCTAGCAG AGGAAAATAA GAACACAGTG GATGTCGAGA 300
ACGGTGCTTC TATGGCAGGA TATGCGGATC TGAAGAAGAAC AATTGCTGTC CTTCTGGATG 360
ACATTTTGCA ACGATTGGTG AAGCTGGAGA ACAAAGTTGA CTATATTGTT GTGAATGGCT 420
CAGCAGCCAA CACCACCAAT GGTACTAGTG GGAATTTGGT GCCAGTAACC ACAAATAAAA 480
GAAGTAGTCT CGAG 494

```

(2) INFORMATION FOR SEQ ID NO:706:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

```

GAATTCGGCC CTTCATGGCC TACTCCCGAG CTCTACTGAC TCCCAAAAGA GCGCCCAAGA 60
AGAAAATGGC CATAAGTGA GTCCCTGTGC TAGGATTTT CATCATAGCT GTGCTGATGA 120
GCGCTCAGGA ATCATGGGCT ATCAAAGAAG AACATGTGAT CATCCAGGCC GAGTTCTATC 180
TGAATCCTGA CCAATCAGGC GAGTTTATGT TTGACTTTGA TGGTGATGAG ATTTTCCATG 240
TGGATATGGC AAGAAGGAG ACGGTCTGGC GGCTTGAAGA ATTTGGACGA TTGCCAGCT 300
TTGAGGCTCA AGTGCAATTG GCCAACATAG CTGTGGACAA AGCCAACCTG GAAATCATGA 360
CAAAGCGCTC CAACTATACT CCGATCACCA ATGTACCTCC AGAGGTAAC GTGCTCACGA 420
ACAGCCCTGT GGAAGTGA GAGCCCAACG TCCTCATCTG TTTCATCGAC AAGTTCACCC 480
CACCCTCGA G 491

```

(2) INFORMATION FOR SEQ ID NO:707:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

```

GAATTCGGCC TTCATGGCCT ACCTTATCTT CTTAACCTTT CAAATACTTG CAGATATTTT 60
GCTTGGTGCT TCCCATCTAT TGCAATACCC CTTTAGATAA AGTCAATTCT TATCTAAAT 120
CAAAATTCATT TTATTGACA ATGTTTACAA ACAACCCAG GACGATAACA ATTACACTCT 180
CAATACTGGC ATCACACCTT CACAATTACA CTAACCCCAA CCTAGGCCAT GAAGGCCTCG 240
AG 242

```

(2) INFORMATION FOR SEQ ID NO:708:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

```

GAATTCGGCC TTCATGGCCT AGACAGAATT ACTGGGAACC ATTTTCCAAG TAGCCCACCA      60
CAAAGGTTGT ATTTTGTCAA ATTGAAGGAG TCATCTGACT TTCCTTAATC ATAAGCTACA      120
AATATAATAA GCTACATTAA TAGATTTTCT AATATTTATT TAACTTTGAA TTTCTGGAAA      180
AAACCCAACT TGGTAATGAT TTATCATCTG AGCTTTGTTT TTGGCTTTGG TATGCTAATT      240
TTTGCTTAG GATTTTATA TCTATTCAT GAGTGGCACC TCGAG                          285

```

(2) INFORMATION FOR SEQ ID NO:709:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

```

GCACGCCATG GGAGAAAAAG AAGAAGCCAA AAAACAGAA GACAAGTCTT TGGCAAAGCC      60
TGAAACTGAT AAAGAACAGG ACAGTGAAAT GGAGAAGGGT GGAAGAGAAG ATATGGATAT      120
AAGTAAATCT GCAGAGGAGC CACAGGAAAA AGTTGACTTG ACTCTAGATT GGTAACTGA      180
AACCTCTGAA GAGGCAAAAG GAGGAGCAGC ACCAGAAGGA CCGAATGAAG CTGAGGTCAC      240
TTCTGGGAAG CCAGAACAGG AAGTACCAGA TGCTGAGGAA GAAAAATCAG TTTCTGGAAC      300
TGATGTCCAA GATCTCGAG                          319

```

(2) INFORMATION FOR SEQ ID NO:710:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 190 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

```

GAATTCGGCC TTCATGGCCT AGACACATAC AAAGATAAGG CTTTGATAAA ATTCAAGAGT      60
TATTTGTATT TTGAGGAAAA AGACTTTGTG GATAAAGCAG AGAAGAGCCT GAAGCAGACT      120
CCCCATAGTG AGATAATATT TTATAAAAAT GGTGTCAATC AAGGTGTGGC TTACAAAGAC      180
ATTTCTCGAG                          190

```

(2) INFORMATION FOR SEQ ID NO:711:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 199 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

```

GGATTGAATT CTAGACCTGC CTCGAGTAAG ACCCCTTTT AAAATGACTC CCACTGTCTA      60
TTCCACAGCC GGTGTGCGGC ATGCTGATTC AATCCCCACA ACAGCCAGG AGGTAGGCGC      120
CGTCCCATCC TCCTTTACAG GAGGGGAAAC TGAGGTTCAG GTGGTCAGAT GGTGAGCTGC      180
CTCCAAGACC ACGCTCGAG                          199

```

(2) INFORMATION FOR SEQ ID NO:712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

```

GAATTCGGCC TTCATGGCCT ACCTGTACCT GTTTTATACT TGCTTTTGCT TCAGCGTTCT      60
GTGGTTGTCA ACAGATGCCA GTGAGAGCAG GTGCCAGCAG GGAAGACAC AATTTGGAGT      120
TGGCCTGAGA TCTGGGGGAG AAAATCACCT CTGGCTTCTT GAAGGAACCC CCTCTCTCCA      180
GTCATGTTGG GCTGCCTGCT GCCAGGACTC TGCCTGCCAT GTCTTTTGGT GGCTAGAAGG      240
GATGTGCATT CAGGCAGACT GCAGCAGGCC CCAGAGCTGC CGGGCTTTTA GAACACTCCT      300
CGAG                                          304

```

(2) INFORMATION FOR SEQ ID NO:713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

```

GAATTCGCCC TTCATGGCCT ACCCAATTCA GTTCCAGAG GAGGTGGAAC CTTCTGCAAC      60
CCAACAGGAG GCCCAATTG AGCCTCCAGT TTCTCCTATG GAGCATGAAC TTTCCATCAG      120
TGAGCAGCAG CAGCCAGTTC AGCCTTCTGA GTCTTCTAGG GAGGTGGAAT CTTCTCTGAC      180
CCAGCAGGAG ACCCCAGGTC AGCCTCCAGA ACATCATGAA GTCACAGTTT CACCTCCAGG      240
TCACCATCAA ACTCATCATT TAGATTCACC CAGTGTCTCT GTGAAGCCTC CAGACGTGCA      300
GCTCACCATA GCAGCAGAGC CTAGTGCAGA GGTGGGAACT TCTCTAGTCC GACCCCTCGA      360
G                                          361

```

(2) INFORMATION FOR SEQ ID NO:714:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```

GAATTCGGCC TTCATGGCCT ACCGAGATGG AAATAACCTA AGAAAAAGAG GGCATCCAGC      60
TCCATCTCCC ATTTGGGCTC ATGCTGCTCT GGGTCTGGTA ACTCTTTGCC TGATGTGCT      120
GATTGGGCTG GTGACGTTGG GGATGATGTT TTTGCAGATA TCTAATGACA TTAATCAGA      180
TTCAGAGAAA TTGAGTCAAC TTCAGAAAAC CATCCAACAG CAGCAGGATA ACTTATCCCA      240
GCAACTGGGC AACTCCAACA ACTTGTCCAT GGAGGAGGAA TTTCTCAAGT CACAGATCTC      300
CAGTCTTAAC CTCGAG                                          316

```

(2) INFORMATION FOR SEQ ID NO:715:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```

GAATTCGGCC TTCATGGCCT AGGCAATATC AAGGTTTTAA ATCTCGGAGA AATGGCTTTC      60
GTTTGCTTGG CTATCGGATG CTTATATACC TTTCTGATAA GCACAACATT TGGCTGTACT      120
TCATCTTCAG ACACCGAGAT AAAAGTTAAC CCTCCTCAGG ATTTTGAGAT AGTGGATCCC      180
GGATACTTAG GTTATCTCTA TTTGCAATGG CAACCCCCAC TGTCTCTGGA TCATTTTAAG      240
GAATGCACAG TGAATATGA ACTAAAATAC CGAAACATTG GTAGTGAAAC ATGGAAGACC      300
ATCATTACTA AGAATCTACA TTACAAAGAT GGGTTTGATC TTAACAAGGG CATTGAAGCC      360
AAGATACACA CGCTTTTACC ATGGCAATGC ACAAATGGAT CAGAAGTTCA AAGTTCCTGG      420
GCAGAAACTA CTTATTGGAT ATCACCACAT CTCGAG                                456

```

(2) INFORMATION FOR SEQ ID NO:716:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```

GAATTCGGCC TTCATGGCCT AGATCATTCA GTGGCTCACC TAATATCACA GAACAAGTGG      60
TGGAGTCAGA ATCTTTTATC TAAAGGAGAT ATTTTCATCC TTAGATTAAT GTCCTCTTCA      120
CAGTCTCATG CTACTTTCCT TTAAGATGAA ATTGCTGTTC TTTTITTAAT TGATTGGGCC      180
AACTTCATTT GTAACGGAAG AATCAAAATT AGAGCCCGGG TCTCATCCTA CGGTATCTCG      240
TCCTGAACCT CTGGTCTCCC TCAAGAATGA CTCAGAAGGA CGGACTCGAG                                290

```

(2) INFORMATION FOR SEQ ID NO:717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

```

GAATTCGGCC TTCATGGCCT AAAAAAAAAA GCCTTTTAAA CTTGTAGGAA TTAAGAAATA      60
AGAATAACCT ACAAATGCT AGCAAAATTT ATCTCATTTT TTTTCATTGT ATTTTCAGGT      120
TTAACTGAAC TGAATGACAG TCCAGTTCCC CTAGAATTG AGCGCTGCAA GTCTCCTACC      180
TCAGACCATG TAAATGGACA CTGCACAAGT CCAACTTCTC AGAGTTGCAG TTCTGGAAAA      240
CGTCTTTCTA GTGCCGATGT TTCAAAAGTA AATCGCTGGG GTCCTGGAAG ACCACCAATT      300
CTCGAG                                306

```

(2) INFORMATION FOR SEQ ID NO:718:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

```
GAATTCGGCC TTCATGGCCT AATATTTATT AAATGACTTG GTAGATAGAG CAACTGACTG      60
AATATATTAT TTTTATAGGAA GAAGAAGAAC ATTTTTCCTT AAATTAAATT TCTTATTTTA      120
TTTCTCTTTC CCCTTTTATC CAGGGTAGGT CCAGGTAAAG CCAAAGGCCT TATCCTTATC      180
TACACTGCTG GGGGACACAA CACAAGAATT TCAAGTTCAA GTATTATTC TCATTTTGAG      240
TAATTTTGTG CTCATTTTGT TCCAGTTCTC ACTCTCAGAA AAAGATTACT CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:719:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

```
GAAACAATAG AAACACTGAG AGAAAATTCA GAGAGACAGA TTAAGATACT GGAACAGGAA      60
AATGAACATC TGAATCAAAC AGTGTCTTCC TTAAGGCAGC GGTCCCAGAT AAGTCAGAA      120
GCAAGAGTGA AAGACATTGA AAAAGAAAAC AAAATTCTTC ATGAATCTAT CAAAGAAACA      180
AGTAGCAAGC TAAGCAAGAT TGAATTTGAA AAAAGACAAA TTAAAAAAGA ATTGGAACAT      240
TATAAAGAAA AAGGAAGCTC GAG          263
```

(2) INFORMATION FOR SEQ ID NO:720:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```
GAATTCGGCC TTCATGGCCT ACCTGCCCTT CTGCGGTCAC AGCTGCCTGC TGGGTGGGAG      60
TCCGGGGGAA TGGTATGTGT GGTCACCAGA GGGCACTGAG TGGGCTTCAG TGGCATGTGA      120
ATCCTGGCAG AGTCTCGGAT CCCCGATGGG GAGAGGAGAA AGCACAAGCC AAGACAACGA      180
GTGGGGGAAG GAGGCAGGGG CTAAGTGACG GGTGGGGGGT GGGGGTGGGA ACTCCAGTGT      240
ACACATTGAC AGTCTCTATG TTGGCTTCAC CAGCGCTTCT CTGTTTGTCT CGTCCCTGGA      300
TTTCTAACAG TTGCCTCGAG          320
```

(2) INFORMATION FOR SEQ ID NO:721:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

GAATTCGGCC	TTCATGGCCT	AGTCGGGAGT	GTCTTAAGCT	TTTCATTAA	CCTAAAGTAC	60
AGAGTCTGCT	CTGTAGAAAT	ATGTCATTAA	GAAAATATT	GAGTCCCAGC	TCCTCCTTGT	120
TGTGTAATGT	CTGATAATT	CACTCATTAA	ATTACCCAGA	CAGACCATAA	AGTCCTCTCA	180
GTTTGCATCA	CCTGAAAGTC	AGTCAGCCTG	GGCTGTGAGG	ATTGTGAGGT	AGAACTCACT	240
TGGAAGGAC	GGCATTAGGG	AAGACTTTAG	GAAAATGGAG	CGGAACCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

CTCGAGACCT	GTGTGCGCAG	GCAACGGGGA	AACTGGAAAT	GCGTTGACAA	ACTGACGCAA	60
AACTGGGCCC	AACAGCCACA	AGGCACTGGT	CGTTTTCCAC	TGGGCAAAGT	TCAGTCGCAT	120
TTCTTTCTGT	TCTCTTCTT	TCTTTCTTTT	CTTTTTCTC	TTTCTTTCTT	TCTTTCTTTC	180
TTTCTTTTTT	CTTTCTCTCT	CTCTTTCTGT	CTGTCTCTCT	CTTTCTTTCC	TTCTTTCTTT	240
CCTTCCTTCT	TTCTTTCTTT	CCTTTCTTTT	CTTTCTTTT	TTTTCTTTT	AAGAGACGGA	300
GTCTCGCTCT	GTTACCCAGG	CCGAGTGCA	ATGGCACAAT	CTCGGCTCAC	TAGGCCATGA	360
AGGCCGAATT	C					371

(2) INFORMATION FOR SEQ ID NO:723:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

GAATTCGGCC	TTCATGGCCT	AGTTCCTTGG	TGGTTTGAAA	GTTAGAGAGA	TCCTGATAAG	60
CATAATGACC	AACATAGAAG	AGATTAAGTA	CCTTTACTCA	TAAATGTGAG	TTACAGACT	120
TCAGGTCTAA	ATTCGTAACA	ATATTAAAGA	TGTATATGGC	TTAAAGTGCT	GGTAGTTTTG	180
ATTAGAATCC	ATAGGTTTCT	AGTCACTGCT	CTTTTCATTA	TTTGAGTTTT	TATGTATTTT	240
TTAACTAGAA	ATAAGAGGGT	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:724:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:


```

GAATTCGCCT TCATGGCCTA GAAAGTTTTT CAAAAATTCT TCAATTGTCT CTGTTGATG      60
CAACTTAATT TTTTGCTGAG AGAGACCTTA AATGTAATTA GTATTGTATA ATTAGCCTGA      120
TTAATCTGAC CTGTACATCA CGAGTCACTT GTCTTTAGCC CAAGAGGAAT GCTTCCTTTC      180
TGATTTGAGG CAGTGGCCCA TCATTGCTTC TAGCAACCTT CCTACTTACT AGATGACCTT      240
GAGTCAAGGT TTCTGTATAT ATGATTTTCAG ATTGTGCCCC TAGAACTGAA AAAGGGTAGG      300
AGAGGCCAAG ATAGGAAAAA TATTTTTTAA AAATTTTAA GTATTTTATT TTTATTGGGA      360
AAATATTTAT TGTAACTCTT CCATTTGTTA TCCTTCTGCC ACTAGCATTG CGTAAAAAGT      420
AAAAAGAGCT TTACATCAA AAGCACAATG AAACCTTTGTA TCCTTAAGTC CGTACTCGAG      480

```

(2) INFORMATION FOR SEQ ID NO:725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AGTCGGAGGT GTAGGAGGGG CCGTGGAGGT CCAGGTGACT      60
GCTTAGAAAA CTGCACAGCA TCTGATGAAA TTAGCGAATA AGAACATCAA CCATGTCTTA      120
CACTCCAGGA GTTGGTGGTG ACCCCGCCCA GTTGGCCAG AGGATCTCTT CTAACATCCA      180
GAAGATCACA CAGTGTCTTG TGGAAATACA AAGAACTCTG AATCAACTTG GAACACCTCA      240
AGATTCACCT GAATTGAGGC AACAGTTGCA ACAGAAGCAG CAGTATACTA ACCAGCTTGC      300
CAAAGAAACA GATAAGTACA TTAAAGAGTT TGGATCTCTG CCCACCACCC CCAGTGAACA      360
CGGTCAAAGG AAAATACAGA AGGATCGCTT AGTGGCAGAG TTCACAACAT CACTGACAAA      420
CTTCCGCAAG GACTCGAG                                438

```

(2) INFORMATION FOR SEQ ID NO:726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

```

GAATTCGGCC TTCATGGCCT AGCTACCTAT CTACAAAAAC TCCTGGATCC TTTATTACGA      60
ATTGTGATCA CATCCTCTGA TTGGCAACAT GTTAGCTTTG AAGTGGATCC TACCAGGTTT      120
GTCATCTTTT CACATAGAAC CGCTGTTTTT TGTTTTTTTT TTTGTTTGT TTGTTTACT      180
AACACTGCAT GAAGCAAGGC ACCTTCTCCC CTTGATCATT AAAATTAGTT TTTAATTATA      240
AAAGTTATAT ACAAATACAC GTTCTTTTAA TGATATCTGT AATTTTTTTT TAAGGTATCC      300
TTTTATTTGC CTTAGATCCA GGGACAAACT AGAGAAAGGT GTCTTTGACT TCCACCTCCA      360
GAGACTGTTA CTAGTTAAGT CTGTTCCCCT GTCCTTTTTC CATGCACCGC CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

```

GAATTCGGCC TTCATGGCCT AAGGAGGTCC ATGAGGAAGT GTCCCAGCCT GTCAGTGCAT      60
CTCATGAGTT CGCTGAGTGA TCAGCAGACA GTTCCAGGAA GTGAACAAGT CCAAGAGGAC      120
TTCTGATTAG TCCACAGTCT CCTCTATAGG CTCAGTAGAT GAAGGCGTTT CTGAGGGGCTT      180
GCCTACACTT CAAAGCACGT CTAGCACTAA TGCTCCTCCG GATGATGATG ATCGATTGGA      240
AAATGTTTCC TATCCCTACC AACTCTACAT TGCTCCTTCC ACCAGCAGTA CAGAGCGACC      300
AAGTCCAAAT GGTCCCGACA GACCTTTTCA GTGTCCAACC TCGGGGGTGC GATTACCCCG      360
TATTCAGAAC CTAAAGCAGC ACATGCTCAT CCACTCAGGA ATTAAACCAT TTCAGTGTGA      420
CCGCTGTGGG TCTCGAG                                     437

```

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

```

GAATTCGGCC TTCATGGCCT AGATCACTGC CCTTTCAATA AACTCTTGC CTCTAGAATC      60
ATATGTTCAA AGTATGAATA CACACCTAGC ACATAGTAGG TGCTCAAATA TTAATTTCCT      120
CCTTGCCCTT CTTATCTACC CTGTGTCCTC CATTTCCCCG TATGATTCCA ACCCAATATA      180
GCAAATGACA TTTACATGTT ATGAAAACAT CTATTGGGTA AAATCAGATC TTGGATAAAG      240
AAATTCGAC TTTTATATAA GCTTTTGTA GACAGAAAAA ACAGAAAGGT ATTCGTTGGT      300
AGAACATTTT TAAGTTCAGG AAAGAAAGCT GGAATAATAC TACGTAACCT TGTCCAGGTT      360
ACTTTGACTG AAACACGTTT TTGGTGGATT TCTTTTCCTC AAAGAACTCT CTAAATGCAA      420
CTCCTTGCTG GATTCTCAC CCGATCTCGA G                                     451

```

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

```

GAATTCACC ATTAAAGATA ATTTATATTA GTGTTTCTAT AACTTCTAAA ACATCTTTTG      60
ATAAGGATAA TAATCTCATT GTCATTCTGT ACTGATATTT GGATATAATC CTAGCAGGGC      120
ATAGCTCTGA TTAAGAACAA TTGAACCAAT CAATTTTTTA TTAGCCTCTA TTTTCACTAG      180
CCAGGATATT TTCATGAAAC TTTTGTAGTT CAAAGCAAGT TTTTCTTTT CAATAGAAAAG      240
TGTTATATTA GTAAACAATT TTGTCTTCTG CCAAGACCAG CTCAGTCGGG AAGATCCTAA      300
CCCAGTGGCA AACTCGAG                                     319

```

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

```

GAATTCGGCC TTCATGGCCT AGGGAAGAAT AAAGAACAAA ACCCAAACT TTGGACCTTA      60
AAAAACCCAG GCTGGCATT TAGTAGCAAT TGGGTGTGTT CGGTTTTGAA TATATTTGTA      120
TATACATGCC TCCATGTGCT TTGGCCTTCT GGTATCTTCA CCAGATGCTG CCTTTTTTTT      180
TTTTTTTAAAC AAGTTCCTGT TTCACCTTTC CAGCTAGCTG CTGGGTATCT CCAACAAAAT      240
ATCTCATAGA TCTCCCACT GTAATGTATT CAAGCCAAAA ATCAGCTCTG CCCATTCTCC      300
ATCCCAAAGC CCTCCTCTT GGTACCAGA CAACCTTAAC CAAACCACTC GAG              353

```

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

```

GAATTCGGCC TTCATGGCCT AGAGGAGGAA GGCCTTCGTA AAGGTTGCAT CTCGGTCCCT      60
TCGCTCCCGG GGACCCGCGG GAAAAAATAA AATCCAACAC CCAGGCCCCG CGGCTAGCCC      120
CTTCCACAG GCTCTCTCCG CTCGATTTTG TCACCGTTAT GTGGGAAGCG AATCCATGTA      180
TTTGCATGCC CGAGTCTTTG AGCCGTGCTA TACCAGTTTG TCCAGATTGT TTATACTAGC      240
AATGCAGTTT ACGGTGAAGA CCTGCCTTCC CTCTGGGAAT CTGGAGCTTC AGTAACAGGA      300
GATGTTTCAC AAAGCAGAAG AATTATTTTC TAAAACAACA AACAATGAAG TGGATGACAT      360
GGACACGTCA GATACCCAGC TCGAG              385

```

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT ACTCCGTCTC CAAAAAATAA AAAAAATAGT GTTCAGCAAG      60
GTTGAAGCAT AAAAGTTAA TAGCCAGAAT CATTATCAAA TTGTATTTCT ATACATCTAC      120
AAGACACAAT CTGAAATGA AATTAGAGAA ACAATTTTCA TGGGCAACAA GAGCAAACT      180
TCATCTCAAA ATAATAATAA TAATAATAAT AATCATCATC ATCATCATCA TCTACAATGT      240
CATTTCCCAT CCAAGTCTCG AG              262

```

(2) INFORMATION FOR SEQ ID NO:733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGCTCCTG GCCTCGGGCA CTCTACCCGC      60
TTCAGCCTCC CAAAGTGCTG CGACTGATTA CAAGTATGAG CCACTACGCC TGACCATAAC      120
ATGTAAAATT ATGGCAAATG GTAATTCACA GCTCAATTCT AAAATGTGAT GAAATTTAAA      180
TCAGAAAGGC CAAATGAGTC ACTTTTTCTT AACACTAAGA ATTATAAACC TTTAAATTTT      240
TTTTGTACTG TAATTTTTTA TGTGACATGT ATATGCTTTT TAATATGTGT GATAGGATGA      300
GGGGCAGGAG AGGGGGCTCT AGACATGAGG GTGCCTGGGG CCTCTGTAGA CCTTCAGATG      360
GCCCTGGGTG TTATAGCAAG AGCTGGTCTA CATCTAATAC TACTGCAGGT GCTGTCATGA      420
ATTCTTTGTA TAATTCCTTG TATATTAAAT GACATTATTC TATGTATAAT GTCATTTAAT      480
ACTTATAACC TACTTTCCTC GAG                                         503

```

(2) INFORMATION FOR SEQ ID NO:734:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 431 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

```

GAATTCGGCC TTCATGGCNT AATGGATTCA TTTTTTTTCA GCAGCATGGC ATAGTGGATT      60
ATGAAATCAA AATTAAC TAC ATGTGGAGTC NTACATTGAA ATCCCCCTTC AACAAAATAG      120
TATACTATGA GTATTTTAA ATTATTTAAC CCTCCGAAC ACCAATTTGT ACACGAATAA      180
AACTTGACAC AACAGGATTT TGTGGGGCGT GAGTAACACA ACATATACAA AAGCACCTTA      240
TAAAGTGTTT TATATAGCAA CTCTCTCTC AGTTTGAACG GGTCTCAGGA TAAATTAGCA      300
AATATGAATT CTAACCTTTG TACTTACATT TTAATTCTGC TAAGTGTTGT AACCCCAATT      360
TAGCAATTAA AATATTTATT TCCAGAATGT TTTGACCCTG AGCATATTTT TAAAAAGCAC      420
AGTAGCTCGA G                                         431

```

(2) INFORMATION FOR SEQ ID NO:735:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

```

AAAAGTGACT GAAAGTTTGC TAGTGTTTT AGTACCGATA TTTACTGGTA GTAAATATAT      60
ACTAAATCCA GTGAAATATG ACTTCTCTAA CTGAGCTTGA CATATCCTGG TTATATCTCA      120
TGGCAGCTGA AACTAGAAA TGACTTATTT TTACCTTGTA GCCACAGCAC ACTTGAGGTT      180
ATTCTTAGGT TTTTGTTAGA GACAAAGCTG GTTAGTGACT CCTGGATTAA GAATTATGAG      240
TGATCCCATG ACCCTCGAG                                         259

```

(2) INFORMATION FOR SEQ ID NO:736:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 443 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTCGGCC	TTCATGGCCT	AAAGGATATT	GGCATGTTCC	TCTTCTCATC	AATATCCTAA	60
AAGACATTTA	TTTTTTACAC	ACTCCTGGG	AAAAATTAAC	TTTTTTTCAC	TGAAAAATATT	120
TCCTTTTTTG	GTTATCTTGA	TCTCAGATTA	TTTGTGAAA	GAATTTTACT	GTACTTAGTT	180
CAAAAGAGTA	GAAAGAATGA	TTTACTATTG	CAGACATATG	TAGGGTAAAA	TCATAATTTA	240
TTTAAACTGA	CTGTACAAAC	CCATTTAGAG	TTGATATTGA	CATAAATGTT	ATTAGCCTAC	300
TAATTTGGAA	CTGCATTTCT	CAACAATGCT	GGCAAGCATC	TTCCGTACTT	AGCATACCAA	360
GTTGTAGGGG	AGAGACTGTG	TATATATTTT	TAAAAAGCAA	TCCAATGGAT	TGTTTTTGT	420
TCATATTTTG	GAAACAACTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

GAATTCGGCT	TCATGGCCTA	CAAAAGATGG	CCCTAAGCCT	GGCCTCTAGC	TTTCACTCGT	60
GGTGAATATT	TCAGACCTAA	AGATCCAGAT	AGTATCTCTG	TTCATATGTG	AATAAGTTGA	120
AGATTGTGGG	GCTACTTTTT	CTCATAGCAC	TTTATTTTGA	ATGTTGTTAG	TTTGTGCTGA	180
GAATGGTCGT	CCGTATTTGA	ACCAATTATT	TATTTTAAAA	TATATTTAAG	CTACATTTT	240
GTTTTGAAAA	ATTGCCATAA	ATTGGTGCC	ACTTTCCTTT	ATTTATTTGA	CTGAGTTAAT	300
ATTATTGTAT	TAACATTTTA	AGTATATGGT	GTTTACATTC	TTATTTCTTT	TGACATTTTG	360
GAAATAATCA	TAACTTGTCT	TTCCAAAATA	ACCATTTTCT	TGATGGAACT	CTTCCTAGAG	420
TTTTTACCAA	ATAGCTAACT	TAGTAGTAA	AACCTCATTG	TGTATCCATT	CCCCCACTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTCGGCC	TTCATGGCCT	AGATTGTCAG	TTTATCTTAG	ATGATGAGGA	AGCAGTACCA	60
AGAAAACACT	TGGGGGTTGA	TACAACAGGC	ACATGAGCCC	TTAAAACTCC	TTCTGTTTT	120
TTTTCTTTTT	TTTTTCTCTT	AGGTAGATTA	GTGCATTTAA	AGCCTGAAGT	TAATTTGACC	180
TAAAATTTTT	ATAAGTCTTT	GCAGAAAGTT	CAC TTGTTTC	CTGAAATCAT	CTCCTTGATA	240
ATTTTTTATG	TAACAGTTGT	TCATATTGTA	GGAATGATAT	ATATGTCATC	CTGTTACACG	300
TGTCAGGCAC	TTCAAAAAGA	CTCCAAGAGA	ACATGCCTGA	GAAAGATAAC	TCCCAATTAA	360
AAATGATTCA	GTCCCTCACT	TGCAATATTC	AGGATAAATG	TGTGGAAACA	TTAGGCTACC	420
AGATAAATAA	AAGGTAGTTA	TTTCTAGGG	TGACTCAGCA	AGATATTTCT	CGAG	474

(2) INFORMATION FOR SEQ ID NO:739:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

```
GAATTCGGCC TTCATGGCCT AGCCTTTGAG ATCAATACCT GTGAAAAGTA GGGAAAGAAA      60
GCAGATGAGG CATAGGGAAA AGGTGGACTG CCACAGGCAA CCCAGCGAAC CTCACCAGCA      120
GCTCTGGAGC TAAATAGCT CTCAGAATT GTCCAGAGTT GGGCTGAGGA GGCCAGAATT      180
TTATTTGTGT TCCACGATG ACGACTTCGA G                                211
```

(2) INFORMATION FOR SEQ ID NO:740:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

```
GAATTCGGCC TTCATGGCCT AAATACCTTA ATGGTGGTAG AGCCTTTACC TGTAGCTTGA      60
AAGGGGAAAG ATTGGAGGTA AGAGAGAAAA TGAAAGAACA CCTCTGGGTC CTTCTGTCCA      120
GTTTTCAGCA CTAGTCTTAC TCAGCTATCC ATTATAGTTT TGCCCTTAAG AAGTCATGAT      180
TAACTTATGA AAAAATTATT TGGGGACAGG AGTGTGATAC CTTCCCTGGT TTTTTCCTGC      240
AGCCCTCAAA TCCTATCTTC CTGCCCCACA ATGTGAGCAG CTACCCCTGA TACTCCTTTT      300
CTTTAATGAT TTAACATCA ACTTGATAAA TAACTTATAG GTGATAGTGA TAATTCCTGA      360
TTCCAAGAAT GCTCGAG                                377
```

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

```
GAATTCGGCC TTCATGGCCT AAGGCGTTTG GGGTTTCCTA GTTGTGCTGC TGCTCTTGCC      60
TAGGGAATCT GCTCTTGCTT TGGCCTCTTT CCTTGGGGCA AGAGTGAGGG GGACAGGGAG      120
CTTCAAGTCA GCCCTCCATG TTGAAGTTTG GTAGAAGCTC TGCCCACACC TTGGACTGGA      180
ACCCAGCCAT GCCAATCCCC ATGATCACCA ATCCGAACCC CTTGAAGTAG AATTTTCATA      240
CCCTACTGAC TAACCACCTT CTTAGCCAGG CCATAGCCAT TCAGCAGTGC CTCCTTCCTC      300
TGGGTAGACA AACAGCCTTG AACAGAAAGG TGGAACACTC GAG                                343
```

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

```
GAATTCGGCC TTCTGGCCTA GAGTCCTTGT TGTCTTTGCG AAAGGTTGCT CATCACCTCT    60
CCCCCTCCCTC TGGCTCTTTT CCGTGGTGAT GCATAGTTCA ATGCGCCCAG GAAGCTTCAT    120
GATGAGGCCG TCACCCAAAC TAGCAGCCCT CCTTTCCTTC TTTCTTTGCC AAGTGTCTCG    180
GACATCAGCT CTTCTCAGT CTTTGACTCT AAATAAAGAA CTTGAATTTC ACCATTCAAC    240
TGAAATCCCT CTAACCTCG                                         259
```

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

```
GAATTCGGCC TTCATGGCCT ACACCGTCGC CATTGCCAGA AAGAGCGATT TATGGCTTTG    60
TTCTTTTCTT AAGCTCCCAA TTTGGCTTCA TACTTTACCT CGTGTGGGCC TTTATTCTCG    120
AATCTTGGCT AAACCTTTTA GGTTTAACCT ATTGGCCTCA AAAATATTGG GCAGTTGCAT    180
TACCTGTCTA CCTCCTTATT GCTATAGTAA TTGGCTACGT GCTCTGTTT GGGATTAACA    240
TGATGAGTAC CTCTCCACTC GACTCCATCC ATACAATCAC AGATAACTAT GCAAAAAATC    300
AACAGCAGAA GAAATACCAA GAGGAGGCCA TTCCAGCCTT AAGAGATATT TCTATTAGTG    360
AAGTAAACCA AATGTTCTTT CTTGCAGCCA AAGAACTTTA CACCAAAAAC TGAAGTGTGT    420
GTAACCATAG TAACACCAAG CAACTCGAG                                         450
```

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

```
GAATTCGGCC TTCATGGCCT AAATCTTCAG GGTCTTAACT TAGTTTTTGA TCCCTAAAT    60
TAGTGCTGCA TATGTAGACT CAGAAACCTC ACGTAAAAAT TTAAATGGC CTCAGGTTGG    120
CAATGTTCCA AGGCAATGGT TAGAAGCAAA TTCAGATTCT CCAAGGCCTC AAATAATTCC    180
TACAGATAAA ATCCAAGGA AATTCAGCAG TGCCTAGTCA AAAATCCACA AATCAGGCTC    240
GAG                                         243
```

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

AAGCGAGGCC	CTGGGGGACA	ACGTGAAACA	ATACTGGGCT	AACCTAAAGC	TGTGGTTCAA	60
GCAGAAGATC	AGCAAAGAGG	AGTTTGACCT	TGAAGCTCAT	AGACTTCTCA	CACAGGATAA	120
TGTCCATTCT	CACAATGATT	TCCTCCTGGC	CATTCTCACG	CGTTGTCAGA	TTTTGGTTTC	180
TACACCAGAT	GGTGCTGGAT	CTTGCCCTTG	GCCAGGGGGT	TCCGCAGCTT	CTCGAG	236

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

GAATTCTAGA	CCTGCCTCGA	GCCTGCAGAC	ATCTCCTCCT	TCTTTGTGGT	TCTGGGAGCC	60
ATTCTGTGCC	TCTAAGGTCC	TCTTTCTTTT	TTCTCACCAA	TACACATATT	TTCTGTCCTT	120
CGCAATTCTA	TTAAACCTCA	CATTTGATGG	TTGTTTTCTT	AAAATTCCTT	TACTTGGTTC	180
CTGCATTCTT	CATTCCTTCC	CAGCACAATC	TCGAG			215

(2) INFORMATION FOR SEQ ID NO:747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

GAATTCGGCC	TTCATGGCCT	AGAAGAAAAC	CCATCAGATA	TTATAATAAG	ACAATAACTC	60
AATTCAGAC	TTGTAAACAA	AGGTGACATT	AATCTATTGA	AATGTGGGAA	AATAGTCAAC	120
CTGTATCCTT	CTCATACCAT	AAATCAGCAT	GTTTGATCAC	TGGAAGCTTC	ATTTTGATGA	180
TTAGCAGTCA	TGTATTGAGG	CTAAATGATA	TGTTTGTCGC	ACAGCATCTC	GAG	233

(2) INFORMATION FOR SEQ ID NO:748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

GAATTCGCCT	TCATGGCCTA	CACAGGAGAA	AAACCCTATG	AATGTAGTGA	ATGTGGGAAA	60
ACTTTTGTTT	AGAAGTCCAC	CCTCAGAGAT	CATCACAGAA	TTCACACAGG	GGAGAAATCC	120
TTTCAATGCA	ATCAATGTGG	AAAAACATTT	GGCCAGAAGT	CAAACCTCAG	AATACATCAG	180

AGAACTCACA CTGGGGAGAA AACTTACCAG TGTAATGAAT GTGAAAAATC CTTCTGGCGA 240
AAAGATCATC TCATTCAACA TCAACTCGAG 270

(2) INFORMATION FOR SEQ ID NO:749:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCTAGT TTAATTACAT ATACCTCTCT GTTGGCTTAG TAGTAATAAA AATATTTTCT 60
GTAGGTGTAG AATATCCTTA CAGTCCAAAA GGAGAGTACA TGTTCACAAT TAAAGTTTGA 120
AATTTGTGCT TTGATAACAG CATGTTTAT TCATTCATTT TTATAATAAT ATTACTGAGC 180
CTGTATCATA TAGTGATGAA CTTTTCAGCT GTTTTGAGGG TTTGTGTTAG CCACATTCAC 240
ATTTGTATAA CCTGTGTTTC TTTTATTATTT TTCTTTATTT TCATTTTAGA TTCAGGGGGT 300
CGGCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:750:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 328 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GAATTCGGCC TTCATGGCCT AAGCTCTTTT AGTGAAGGAT TGTTTTAAAT AAGAGCTCTC 60
AGTTCAAGAC AACTACTGTT AGGAGCTTAA ATCGGAACCA CAATCAGCAT ATAAAGGTCC 120
TAATCCTGAC CTTAATCCCT TTGGAATATT GGTTTTATAA ATCATCAATC AACAGTGTTT 180
CACTATGAAA GCATATTCTG TCTTCTTCTT TTCATGTATT CTTTCACTGC TGGTGCTTAA 240
TGTCTTTCCT TCCTCTTCTG CCATTTCTCT TTCCATGAAT TATAATTGCC TTTTGAATTC 300
AGAAATTAAA ACCACTCCAC AGCTCGAG 328

(2) INFORMATION FOR SEQ ID NO:751:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 239 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GAATTCGGCC TTCATGGCCT AATAAGGAAG AAATTGTCTC ACTTTATTGA ATAGTTGATT 60
TAAATTTTCT GGTATTTAGA GGTAATATAG TATAAGTTTT TTGTATATTT ATCTAAGATT 120
TTCCTTTTGA AAATTTTCTT CCCTTTTCAT ATTATTTTCA TTAAACGATT TTCCTTTAAA 180
ATTTGTTACT AACAAGAACT ATCTAATATG CAATGAGATT TTTGCAGGGC ATTCTCGAG 239

(2) INFORMATION FOR SEQ ID NO:752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

GAATTCGGCC	TTCATGGCCT	AAGGAAAGTA	CTTTAGACAA	AAAAAAAAAA	AAAAGTGAAA	60
TTAATTCTG	GGGCAATGAA	AGGAAATGTC	ATTGGCAGTT	TTACCTTTAT	TCTGCTAATG	120
GCTATTGTG	TGTCTTTTAC	CTGGAGGCAC	TTGGAAGTGG	TGGCACAGAA	TGCTGTATGT	180
ACAGGATATC	ATCTACATGG	GAATAATTGT	TGTAAACACC	CCAAACTCGA	G	231

(2) INFORMATION FOR SEQ ID NO:753:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

GAATTCGGCC	TTCATGGCCT	ACAATAGAGC	TCTTAAACTT	ATTTAACTGA	AATTTTGTAT	60
CTTTTCACCA	ACATTTCCCC	AACTCCCCTT	TACCCCAACT	ACTCCAGCCA	CTGATAACCA	120
CCATTCTGTT	CTCTATTTCT	TTTTCTTTT	TTTTTTTTTT	TTTTTAAGAG	ATGGCGTCTT	180
GCTGTGTCGC	CCAGGCTGAA	GGGCAGTGGC	ATGATCTCGG	CTTACTGCAA	CCTCTGCCTC	240
CCCGGTTTAA	GCAATTCTCT	ACCTCAGCCT	CCCGAGTAGC	TGGGATTACA	AGCACCCATC	300
CACTCGAG						308

(2) INFORMATION FOR SEQ ID NO:754:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

GAATTCCTAGA	CCTGCCTCGA	GCCCTTTGTG	GTTTTTAAGA	AAAAAATTCT	GTGCAGATCT	60
GTTCTCTCTC	CTGCTCCTTC	CCTTTTCTCT	ACATACAGTG	CTCATTTGGAG	GCTCCCCACT	120
CGAG						124

(2) INFORMATION FOR SEQ ID NO:755:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

GAATTCGGCC	TTCATGGCCT	AATCGGTGTC	TTTGGTAAAA	ATTCTATGAG	GATGACATAT	60
TCCATCATGT	TATTCGTTTC	ACATTTCCTT	TTGCTCAGTC	TCCAATGCAA	GCACAGCTTG	120
TGGTATAACC	TATTGTTTTT	CCATTCTAAT	AACTTCTCAA	TCGATCTTCG	TGTTCTTTTA	180
CTGAGGCAAA	TAAGTGGCCA	CATACTGCAA	CCTAATGTGC	AGCAGCAACA	AAGGCAGCCA	240
CAAAGTAGCC	AACGTACATT	AACAGGAAGG	TTCTTCTTAA	GACAACTGTT	AACTCTGTTG	300
ATGCTGGCTT	TAAATTCTTC	AGGAGCTACT	TTTTCAGTTA	ATGAAGAAGG	GAATTCAGAT	360
TCAAATTTG						369

(2) INFORMATION FOR SEQ ID NO:756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

GAATTCGGCC	TTCATGGCCT	ACCGGCGAGG	AATAGGAATC	ATGGCGGCTG	CGCTGTTCTG	60
GCTGTGCGGA	TTGCGCTGTC	TGGGCACCCA	CGGAGCCTCC	GGGGCTGCCG	GCACAGTCTT	120
CACTACCGTA	GAAGACCTTG	GCTCCAAGAT	ACTCCTCACC	TGCTCCTTGA	ATGACAGCGC	180
CACAGAGGTC	ACAGGGCACC	GCTGGCTGAA	GGGGGGCGTG	GTGCTGAAGG	AGGATGCGCT	240
GCCCGGCCAG	AAAACGGAGT	TCAAGGTGGA	CTCGGACGAC	CAGTGGGGAG	AGTACTCCTG	300
CGTCTTCCTC	CCCAGGCCCA	TGGGCACGGC	CAACATCCAG	CTCCACGGGC	CTCCCAGAGT	360
GAAGGCTGTG	AAGTCGTCAG	AACGCATCCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

GAATTCGGCC	TTCATGGCCT	ACTGATGTTG	AAGACGACAC	CACGGCTTTG	ATGGAATATC	60
AGATATTGAA	AATGTCTCTC	TGCCTGTTCA	TCCTTCTGTT	TCTCACACCT	GGTATTTTAT	120
GCATTTGTCC	TCTCCAATGT	ATATGCACAG	AGAGGCACAG	GCATGTGGAC	TGTTTCAGGCA	180
GAAACTTGTC	TACATTACCA	TCTGGACTGC	AAGAGAATAT	TATACATTTA	AACCTGTCTT	240
ATAACCACTT	TACTGATCTG	CATAACCAGT	TAACCCAATA	TACCAATCTG	AGGACCCTGG	300
ACATTTCAAA	CAACAGGCTT	GAAAGCCTGC	CTGCTCACTT	ACCTCGGTCT	CTGTGGAACA	360
TGTCTGCTGC	TAACAACAAC	ATTAACTTC	TTGACAAATC	TGATACTGCT	TATCAGTGGA	420
ATCTTAAATA	TCTGGATGTT	TCTAAGAACA	TGCTGGAAAA	GGTTGTCCTC	ATTAAAAATA	480
CACTAAGAAG	TCTCGAG					497

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

GAATTCGGCC	TTCATGGCCT	AACCAAATCA	ACAACAACCT	ATTTAGCTGT	TCCCCAACCT	60
TTTCCTCCGA	CCCCCTAACA	ACCCCTCTCC	TAATACTAAC	TACCTGACTC	CTACCCCTCA	120
CAATCATGGC	AAGCCAACGC	CACTTATCCA	GTGAACCACT	ATCACGAAAA	AAACTCTACC	180
TCTCTATACT	AATCTCCCTA	CAAATCTCCT	TAATTATAAC	ATTACAGGCC	ACAAAACCTCG	240
AG						242

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 221 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

GAATTCGGCC	TTCATAGCCT	ACCTAAATTA	ATAATAATGT	ATAGTTCAGA	ATTGCTAAGA	60
GTACTTTTTT	TTTTTTTTTT	TNGAGACAGG	TTCTCGCTCT	GCCCTCCAGC	CTGGTGACAG	120
AGCAAGATTC	CATCTCAAAA	AAGAAAAAAA	ACACACAGCT	AATAGAATTG	CCATTGTTTT	180
TCATAATAGA	ATCTAGCTGC	TTACTCCAAC	CTCACCTCGA	G		221

(2) INFORMATION FOR SEQ ID NO:760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

GAATTCGGCC	TTCATGGCCT	AAAATCAAAG	ACTTTGCCAA	TACCATTCCCT	GGCCATGGAG	60
GCATCATGGA	TCGCTTTGAC	TGCCAGTATC	TGATGGCCAC	CTTTGTCAAT	GTATACATCG	120
CCAGTTTTAT	CAGAGGCCCT	AACCCAAGCA	AACTGATTCA	GCAGTTCCTG	ACTTTACGGC	180
CAGATCAGCA	GCTCCACATC	TTCAACACGC	TGCGGTCTCA	TCTGATCGAC	AAAGGGATGC	240
TGACATCCAC	CACAGAGGAC	GAGTAGGGGC	CACCCAGGGC	CAGGAGAACA	GGAACAGAAC	300
TGAGCAGGGG	CAGGTCTCCA	AGGCAAGCCC	AGCTGGTGTG	ACTTAGACAA	TGACGAGGCT	360
TCAACTCACT	GTCTTTTTTT	TTTTTTTTTG	GAGGGTATTT	TTTATTTGTG	GGTTCAAAAA	420
ATCTGTATAT	ACAGTCTATG	TGTTTAGAAT	TTGTGTTGTA	AGTAAACTAC	AGCTTTGAGT	480
TGGAAGAAG	TCACGGGTTG	TAAAACCATT	TGATTTTTTT	TAAAACAAAA	GTATTAATAA	540
TCTGGAAGAC	TCGAG					555

(2) INFORMATION FOR SEQ ID NO:761:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

```

GGCCGATCAG GTTATTTTTT GAAAGTTTTA CTTACAGAGC ATATAAATTA CCCTTGGTTA      60
TTCTCAGCTG TGATTGAGTT CTGTGAAAGC ATAGTACCCT AGTACCCTGG GATATCTCTA      120
CATGTGAAAT TATTCAAATG TCTCCCTTAC TTTT TTTT TTTT TTTT AGACAGGCTC      180
TGTGCCCCAT GCTGCAGTGC AGTGGCACAA CTATGGCTCA TCTCAGCCTC GACCTCCTGG      240
GCTCAAGCGA TCCTCCACAC TCAGCCCCCC AGGCAGCTGG GACCACAGGC ACACACCACC      300
ATGTCCAGCC AATTCCTGTA TTTT                                     324

```

(2) INFORMATION FOR SEQ ID NO:762:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

```

GAATTCGGCC TTCATGGCCT AGTGCCGGGG AGAAAGGGCT TCCTCCCCCA CACATCAGAC      60
AGGGCACCAA TGAGTGGGGC ACTCAAAAAA GAGAGCAGGC CCTGGAGAGG AAACCAAAGC      120
AAAGGTTAGT TTTATAATCT GATCCCTCAA TTACCTGTAA TTCATATTTT CTAAATGCAT      180
TAGCTCTAAT TCATTGTACT GCCCCCAAAA CAGAATAATA CTTTGAAACA TTAATACAA      240
ACTACAATA AAAAATAAAA ATTAGGCCTG GCGTGGTGGC TCATGCCTGT AATCCCAGCA      300
CTTTGGAAGG CCGAGGCGGG TGGATCACTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

```

GAATTCGGCC TTCATGGCCT AATTTGAATC AACACAACCA CCCACAGCCT AATTATTAGC      60
ATCATCCCTC TACTATTTT TAACCAAATC AACACAACCC TATTTAGCTG TTCCCCAACC      120
TTTTCCTCCG ACCCCCTAAC AACCCCTCCT CTAATACTAA CTACCTGACT CCTACCCCTC      180
ACAATCATGG CAAGCCAACG CCACTTATCC AGTGAACCAC TATCACGAAA AAAACTCTAC      240
CTCTCTATAC TAATCTCCCT ACAAACTCC TTAATTATAA CATTCAACAAC CACAGAACTC      300
GAG                                     303

```

(2) INFORMATION FOR SEQ ID NO:764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

```

GAATTCGGCC TTCATGGCCT AGGGATTAA AGAGTTTTTC TTGGGTGTTT GTCAAACTTT      60
TATTTCCCTGT CTGTGTGCAG AGGGGATTCA ACTTCAATTT TTCTGCAGTG GCTCTGGGTC      120
CAGCCCCCTTA CTTAAAGATC TGGAAAGCAT GAAGACTGGG CTTTTTTTCC TATGTCTCTT      180
GGGAACTGCA GCTGCAATCC CGACAAATGC AAGATTATTA TCTGATCATT CCAAACCAAC      240
TGCTGAAACG GTAGCACCTC TCGAG                                           265

```

(2) INFORMATION FOR SEQ ID NO:765:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 427 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

```

GAATTCGGCC TTCATGGCCT ACCAACAGCA AGCTCCAATA TCACACATCC AGACTCCTAT      60
GCTTTCCCAA GAACAGGCAC AACCCCGCA GCAGGGTTTA TTTCAGCCTC AGGTGGCCCT      120
GGGCTCCCTT CCACCTAATC CAATGCCTCA AAGCCAACAA GGAACCATGT TCCAGTCACA      180
GCACTCAATA GTTGCCATGC AGAGTAACTC TCCATCCCAG GAACAGCAGC AGCAGCAGCA      240
ACAGCAGCAG CAACAGCAGC AGCAACAACA ACAGAGCATT TTATTGAGTA ATCAGAATAC      300
CATGGCTACA ATGGCGTCTC CAAAGCAACC ACCACCAAAC ATGATATTCA ACCCAAATCA      360
AAATCCAATG GCTAATCAGG AGCAACAGAA CCAGTCAATT TTTCACCAAC AAAGTAACAG      420
TCTCGAG                                           427

```

(2) INFORMATION FOR SEQ ID NO:766:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

```

CGATTGAATT CTTGTCTGTT CTGCCTCACT CCCGAGCTCT ACTGACTCCC AACAGAGCGC      60
CCAAGAAGAA AATGGCCATA AGTGGAGTCC CTGTGCTAGG ATTTTTCATC ATAGCTGTGC      120
TGATGAGCGC TCAGGAATCA TGGGCTATCA AAGAAGAACA TGTGATCATC CAGGCCGAGT      180
TCTATCTGAA TCCTGACCAA TCAGGCGAGT TTATGTTTGA CTTTGATGGT GATGAGATT      240
TCCATGTGGA TATGGCAAAG AAGGAGGGTC TCGAG                                           275

```

(2) INFORMATION FOR SEQ ID NO:767:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 341 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

```

GAATTCGGCC TTCATGGCCT ACGTAATTCT GGAAAAGTGA ATACTTGTGA AGAGTCGTCT      60
TGAATGATTT GTAAAAAATC CTGTTCTTAT ATTCAACGAG TTTCGAATCT TTGTCAGAGG      120

```

AGTATTACCA TTAGATTGAA AAAAAGGAAA ATAAATAATA AACACTTTTA AAAAACTCC	180
CCATTCTCTT ATTCTCACTT TTAGGAAAAG AGACTGACTA ATATCTTCTG CCACAAATAC	240
CGATGTTCTT AAAAATATTT ATGGGACTGC TTTGGCAAC CAGCCCTATT TTGTTTCAT	300
ATCCCTTTTT GCTCCCATCT TTCCAACTC ATAACTCGA G	341

(2) INFORMATION FOR SEQ ID NO:768:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

GAATTCGGCC TTCATGGCCT ACAGAAAGAG TTTGAGACCT GAATAGCTCC CAGATTTTCAG	60
TCTTTTCCTG TTTTGTAA CTTTGGGTTA AAAAAAAAAA AAGTCTGATT GGTTTTAATT	120
GAAGGAAAGA TTTGTACTAC AGTTCTTTTG TTGTAAAGAG TTGTGTTGT CTTTCCCCC	180
AAAGTGGTTT CAGCAATATT TAAGGAGATG TAAGAGCTTT AAAAAAGAC ACTTGATACT	240
TGTTTTCAA CCAGTATACA AGATAAGCTT CCAGGCTCGA G	281

(2) INFORMATION FOR SEQ ID NO:769:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

GAATTCGGCC TTCATGGCCT ACTAACGAGG AAAGGGATT AAAGAGTTTT TCTTGGGTGT	60
TTGTCAAAC TTTATCCCT GTCTGTGTC AGAGGGGATT CAACTTCAAT TTTCTGCAG	120
TGGCTCTGGG TCCAGCCCCT TACTTAAAGA TCTGGAAAGC ATGAAGACTG GGCTTTTTT	180
CCTATGTCTC TTGGGAAGT CAGCTGCAAT CCCGACAAAT GCAAGATTAT TATCTGATCA	240
TTCCAAACCA ACTGCTGAAA CGGTAGCACC TGACAACACT GCAATCCCCA GTTTAAGGGC	300
TGAAGCTGAA GAAAATGAAA AAGAAACAGC AGTATCCACA GAGAGACTCG AG	352

(2) INFORMATION FOR SEQ ID NO:770:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

GAGCGTGGTG GATATAAAAC AGGTAAGAGA CTTTCATGGT ATACCTTTAT ATTGTTGGAT	60
TAAAGGCACT GCCAACTCAA AAACTTAAC CGAAAAATTT TTTAATCAG TTAATATTT	120
ACTGATATGA AAATGACATG AAATAACTT TTTGTGTTT ACTTAAAGGG TGCTCTGTTT	180
GAAACTTCCT CAGACAACTG AATGGGAGAA CCAGATGAAT TTAGTAAAAG TATTAACGTC	240
AAATATTTAT ACTGCTTTTT TTTGTTTGT TGTTTTGTG ACAGAATCTT GCTCTGTTC	300

CCAGGCTGGT CTCGAG

316

(2) INFORMATION FOR SEQ ID NO:771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

```

GAATTCGGCC TTCATGGCCT ACTTTGATGG AATATCAGAT ATTGAAAATG TCTCTCTGCC      60
TGTTTCATCCT TCTGTTTCTC ACACCTGGTA TTTTATGCAT TTGTCCTCTC CAATGTATAT      120
GCACAGAGAG GCACAGGCAT GTGGACTGTT CAGGCAGAAA CTTGTCTACA TTACCATCTG      180
GACTGCAAGA GAATATTATA CATTTAAACC TGTCTTATAA CCACTTTACT GATCTGCATA      240
ACCAAGTTAAC CCAATATAAC AATCTGAGGA CCCTGGACAT TTCAAACAAC AGGCTTGAAA      300
GCCTGCCTGC TCACTTACCT CGGTCTCTGT GGAACATGTC TGCTGCTAAC AACACATTA      360
AACTTCTTGA CAAATCTGAT ACTGCTTATC AGTGAATCT TAAATATCTG GATGTTTCTA      420
AGAACATGCT GGAAAAGGTT GTCCTCATTA AAAATACACT AAGAAGTCTC GAG              473

```

(2) INFORMATION FOR SEQ ID NO:772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

```

ATACAGTAAT CAAAGTAAGT AATATTTCAA TCCAATATTT TAAAAATCA GAATTAATGC      60
AAAAAAAACC ATGATGAACA AAATATTAAA ATTTAAAAATA AAGACAGGAT TAGTATTACT      120
GAGTTTTTCT TTTGTCCCAG GCTCTAATAT GGCTTGGCAT GGGGCAGAAC ATTACAACAT      180
ACCAAGTCGTG TCATGGTGCC CAAGGCTCCA CAGACCTCAG TGGCTCCCTG CTGCCTGCCA      240
CAGCAATCTC GAG              253

```

(2) INFORMATION FOR SEQ ID NO:773:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

```

GAATTCGGCC TTCATGGCCT AGTGAGAATT GACTGTTGCT TTTGTTTGCC TGCTTACTGT      60
TTTCTTTTAT TTATTGTTT TTGGACCTGT GGCACAAAGG ATCTGTTTAC TGACCATCCT      120
TATTGTGAGG CACACAGTCA CCATGGCACC CTGCGCGTTA CTCCTGTTCC ACTTGTTTAT      180
TCTCTGTATC CCCATACTAG TTATTATCGA AACCATCAGC CTACTCATT CACCAATAGC      240
CCTGGCCGTA CGCCTAACCG CTAACATTAC TACAGGCCAC CTCGAG              286

```


(2) INFORMATION FOR SEQ ID NO:774:.

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

```

GAGGCTGACA AAATACTCAC CTTTACCTTT ATTTTTCAT TTTATACTCA CAACCATATT      60
TTTTTTGGCC CCCTTCCCTT TATTTTAACT CATAACTGAT ACTTAAAGGT GCTCTGCCTT      120
ATTAAATCAG CTCCTAGGCT GCAAGTGCAT AATATTAAA AATTGCAAC TTTGACTTTT      180
TAAAAATCTG GTCTTGGTAT GGAGCAACTT TGCCTTTTT TTTTTTTTT TTGAGACAGA      240
GTCTCGCTTT NTCGCCCAGG CTGGAGTGCA GTGGTCCCAT CTCAGCTCAC TGCAACCTCC      300
TCCTCCCGGG TTCAAGAGAT TCTCTGCCT CAGCTCCCG AGTAGCTGGG ATTACAGGTG      360
CCTGCCCCAA CACCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:775:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

```

GGCCTGGTAG GATAAGAATA TAAACTCAG GGTGACCGAA AAATCAGAAT AGGTGTGGT      60
ATAGAATGGG GTCTCCTCCT CCGGCGGGGT CGAAGAAGGT GGTGTGAGG TTGCGGTCTG      120
TTAGTAGTAT AGTGATGCCA GCAGCTAGGA CTGGGAGAGA TAGGAGAAGT AGGACTGCTG      180
TGATTAGGAC GGATCAGACG AAGAGGGGCG TTTGGTATTG GGTATGGCA GGGGGTTTTA      240
TATTGATAAT TGTTGTGATG AAATTGATGG CCCCTAAGAT AGAGGAGACA CCTGCTAGGT      300
GTAAGGAGAA GATGGTTAGG TCTACGAGG CTCCAGGGAA GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:776:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

```

GAATTCGGCC TTCATGGCCT AAGAGGATAA GGAAGAAAA AGAAGAAAGT ATTCCATTCC      60
CACATCCCTT TAGGTTGGCT TCTTATTTTA TGTTTTGTT GGTGTGTTA TTTTGCTTGT      120
TTAACATTTT CAACTAGCTA TAGAAACGTT TGCAATTCTT ATTACTGATT AGCATTCCAA      180
AACTTTGTAA TGAACATTTT TCTCTCTTTC TTTTTTTTT TTTTNGAG ACAGGGTCTC      240
GCTCTGTAC CAAGCTGGAG TGCAAGTGGC CAAGATCCTA CTGCTGTCCA TTCCAGCCTG      300
GGTGACAGAA CAAGACCTTG TCCGCCACC TTCCACCCCC CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:777:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 377 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

```
GAATTCGGCC TTCATGGCCT ACATGTTTAT TGAGCATTTA CTGTTTACCC ATCAGTATTC      60
TTGATGCTAA GGATATAGCA GTGAACAAAA CAATCCTTGT GGACTTACAT CATAGTAGGG      120
AAAATAGACA ATAAATAAAT GTATGATAAG TCAGTTGATA ATAAGTGCTA CGAAGTAAAA      180
CAAAGCAGGA ATAAAGTTGG GGAGAAAAGT GGAGGGTGAT TGCTATTTCA GTTGAGATCA      240
TTGGGATGGT CTTTCTGAG GAGGGGACAT TTGCATAGAG AAGCAAGGAT GTGAGTTATG      300
TGCTGCTGT GTGTAGAACA TTCTGGGAAA GGCAGAGAA GGAACAAGA CTATTCCAGA      360
AAAAGAGGGC ACTCGAG                                     377
```

(2) INFORMATION FOR SEQ ID NO:778:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```
GAATTCGGCC TTCATGGCCT AGCACAGCTA GACGGTTCCA GCTCAGGGTC TCTCATGAAG      60
TTGCAATCAA AATATTGGCA GGAGAGAAAA ACATATTTTC AGAAGCTGCA GGCATAGGAA      120
GACTTGGCTG GGGTTGAAGG ATCCAATTCC AAGATGGCGC ACTCAGTGGC TCTTGGCTGG      180
AGGCCTCAGT TCCCTGCTGC GTGGAGCTCT CCCTCCAGCT GCTTGAGTGG ACTCATGACA      240
TGCAGCTGGC CTCCCTGGA GCAGTCGATC CAACAATGAG CATGGCCATG AACTAGAGCT      300
CGAG                                     304
```

(2) INFORMATION FOR SEQ ID NO:779:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```
GAATTCGGCC TTCATGGCCT AGCCAAAACC ACAGAATATA TAATATAGAT CTTGGGGATA      60
CAGCAGAGAA AAAAGACAAA AATCCCTGTT ACAATCCGTT CTAGAATTGA TGTTCTTTG      120
TTGGTTAATT CAAGTTTGA TTTCAGAAAT CTTACCTCTT GGTGACTGCC TAGAGTGGCA      180
TTGGGCTGGA GGGGAGGAAC TGTTTCATGTT GGAAATGGGG AATGGGCCAA AAATGCAATT      240
GAGTAGGTTG ATTAAGTTGT CTGCTGTCAG AGTGAAGCA GGGGTAGTTT CCCTTCCGA      300
CCAGAGGCAT CTCGAG                                     316
```

(2) INFORMATION FOR SEQ ID NO:780:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

GAATTCGGCC TTCATGGCCT ACAGAAGATT TGGACAATTC CATTGATAAA ACAGAAGCTG	60
GAATTAAGGA GCTTCAGAAG AGTATGGAGC GCTGGAAAAA TATGGAAAAA GAACATATGG	120
ATGCTATAAA TCATGATACT AAAGAACTGG AAAAGATGAC AAATCGGCAA GGCATGCTAT	180
TNAAGAAGAA AGAAGAGTGT ATGAAGAAAA TTCGAGAACT TGGATCACTT CCCCAGGAAG	240
CATTTGAAAA GCACCAGGCT CGAG	264

(2) INFORMATION FOR SEQ ID NO:781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

GAATTCGGCC AAAGAGGCCT AGCGATTGGG TCTTTGATAT CTGTAAGCCG TTGAATTAGC	60
CCTGCCCTCT GTTCTTAGTT TAGGAGACCA TAGATGTGCC CTTATTATTG AAAGTATTTT	120
TATTCAGTTA CTGAAGTTAT CTTACCTGAT ACATAATTTT ACCCATAGAA AATAATATGA	180
AAATAGCAAA ATCACTCAGG TAAGATAGAT GAGTGCCTGC TGTGTTCAAG AGACTGTAA	240
TATGAGGCTC TGGGGCTGCA AAAAATCAAG TTGCTAAGAA ATATGAGGTC AGAGCAGCAG	300
AAGTTCTGAG TAACCACTGA TTACTGGACT TGGGGTGATC AGAAGTGACT GTGTGGGAGA	360
GGTGAAATTG AGCAGACTCT GAAGGAACCT CTGGGTTTTG GTAAATAGGG AGCTGGGGAT	420
GAGGATGCC CAGGTTTTAG AAAGAACACA GGCTGTTGAA TCACACCTGG GTTCAAACCC	480
TGGCTTGCTA CTCCCTAGTT TGTGACCTTG TCAAATTCCT TGATTTCTTT TTTCTTTTTC	540
TTTTTTTAAT TTTGGAGACA ACAGTCTCGC TCTGTCACCC	580

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

GAATTCGGCC AAAGAGGCCT AGAATGGTAG AGTAAAAAGA ACCCTCTGCT GAGTAACCAA	60
GCCTTTAATT TCCTGTTCTT GCTGTAGGGC TTTCACAAAT GCATTTTTC GCGGTTGGT	120
GTGTCCTCGA G	131

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

GAATTCGGCC AAAGAGGCCT AGATTGAGGT TGTGGTAGAT TAGGCGTAGG TAGAAGTAGA	60
GGTTAAGGAG GGTGATGGTG GCTATGATGG TCGGGCTCGA GGCAGGTCTA GAATTCAATC	120
G	121

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

GAATTCGGCC AAAGAGGCCT AAGCAAGATG AAGCCCAACA TCATCTTGT ACTTTCCTCG	60
CTCCTCATCT TGGAGAAGCA AGCAGCTGTG ATGGGACAAA AAGGTGGATC AAAAGGCCGA	120
TTACCAAGTG AATTTTCCCA ATTTCCACAC GGACAAAAGG GCCAGCACTA TTCTGGACAA	180
AAAGGCAAGC AACAACTGA ATCCAAAGGC AGTTTTTCTA TTCAATACAC ATATCATGTA	240
GATGCCAATG ATCATGACCA GACCCGAAAA AGTCAGCAAT ATGATTGAA TGCCCTACAT	300
AAGACGACAA AATCACAACG ACATCTAGGT GGAAGTCAAC AACTGCTCCA TAATAACAA	360
GAAGGCAGAG ACCATGATAA ATCAAAGGT CATTTTACA GGGTA	405

(2) INFORMATION FOR SEQ ID NO:785:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 642 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

GAATTCGGCC AAAGAGGCCT ACTACTCACC TCTTGCTCTC TCCAACCAT AGAAACAGCC	60
ACGACTCCTA CCACAACTT GGGAAACACC ACCACTGAGA CCACCTCCA CAGTACTCCC	120
AGCTTCACTT CTTAGCCAT CTACTCCACC GTCAACATAT CCACAACTAC CATCTCCTCA	180
TTCCCCCTT CCTCAGGTAC CATGGTGACA TTCACAACCA TGAACCCATC CTCTCTGAGT	240
ACAGACATAT CTACCACCAC ACTGAAAAAT ATCACCACAGC CTTCTGTGGG CTCTACTGGT	300
TTCTGACTG CAGCTACAGA CCTCACCTCA ACATTCACTG TTTCCACTTC CTCAGCAATG	360
TCCACAAGTG TCACTCCATC TGCCCCCAGC ATCCAGAATA AAGAAATCTC AACACTTGTG	420
AGTACAACCA CTACCACCAG TCCCACTGAG AGAATGACTC TCACAAGTAC AGAGAATACC	480
CCGACAAGTT ACATCCTGAC CACCAGTCCA GTGACATATT CATTTTCCCC TTCCATGTCT	540
GCCAGCAGTG ACTGGACCAC TGACACAGAG AGCATCTCCT CAGCTCCAGC CATCACCAGT	600
AACTCCACA CAACAGCTGA ATCCACCCTG GCAGGTCTAG AA	642

(2) INFORMATION FOR SEQ ID NO:786:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 469 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

GAATTCGGCC	AAAGAGGCCT	ATGGCCTTGG	AAGGGATGAG	CAAACGGAAG	AGAAAGAGAA	60
GTGTCCAGGA	GGGAGAGAAT	CCTGACGACG	GCGTTCGCGG	GAGTCCGCCG	GAAGACTACA	120
GGCTTGGACA	GGTCGCCAGT	AGCTTATTTC	GCGGCGAACA	CCATTCCAGA	GGTGGCACCG	180
GTCGGCTGGC	GTCCCTCTTC	AGTTCTCTGG	AGCCCCAGAT	TCAACCCGTG	TACGTGCCTG	240
TGCCTAAACA	AACCATCAAA	AAAACGAAAC	GGAATGAGGA	GGAAGAAAGT	ACATCCCAGA	300
TTGAAAGACC	ACTTTCGCAA	GAACCTGCCA	AAAAAGTGAA	AGCGAAGAAG	AAACACACTA	360
ACGCAGAAAA	AAAGTTGGCA	GACAGGGAAA	GCGCTCTAGC	GAGTGCTGAT	TTAGAAGAAG	420
AAATTCACCA	GAAACAAGGG	CTTAGCTCGA	GCAGGTCTAG	AATTCATG		469

(2) INFORMATION FOR SEQ ID NO:787:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 501 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

GAATTCGGCC	AAAGAGGCCT	AAGAAAAGAT	ATAAATCAGA	GAAAAAGCAT	GAAGCGTATC	60
ATATTGATTT	TAACAGTATT	GCTTGCCATG	TTAGGGCAGG	TTGCCTATGC	GCAGAAAACG	120
TGTGTGATCG	CATCGGCAGA	AAATCATGTG	CCTATTGCTG	AAGCACTTAT	TCATACCAAT	180
AACAATCATT	GGGCAAGAAC	AGATTATCGG	GGCTATTGGA	CGATGCGCTA	TCAGTTTGAT	240
TCAGCAACCG	TATCGAAACC	TGGTTTATG	AAGGCAACTA	TCCGGTACAA	GGAAGTCCCG	300
GATACTCTGT	TTCTCTTGCC	GGATGCCAAA	CAGTTAGGCG	AAGTGACAGT	TTGGGGCAAG	360
AATCAGGAAG	GCATCAAAAA	TATGGAAGAG	GATATTCAGG	AGAAGATAAA	CTCTTTGCCA	420
ACTTCATCTG	CTGGCATTGG	TTTTGATGCT	TTCGGATGGA	TGGATAAACA	GGGAAAACGT	480
GATAAGAAGC	ATCTGCAACA	G				501

(2) INFORMATION FOR SEQ ID NO:788:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 122 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

TGATGATCGA	TATCCAGAAA	GACACTGCGG	TGGAAGGTGA	GGAGATTGAA	GTCAACTGCA	60
CTGCTATGGC	CAGCAAGCCA	GCCACGACTA	TCAGGTGGTT	CAAAGGGAAC	GCAGAACTCG	120
AG						122

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 274 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

GGTGAGCTGA GATCGACCA CTGCACTGCA AGACCCTGTC TCAAAACAAA CAAACAAACA	60
ACAACAACAA CAACAAACCA AACCAAACAA AAAACCTGCA TAGCCAACTA GACCAGCATA	120
GAGGGCGAAA ACCATGCTTT TTGTCAAATG GTACTGTTTA TTCTGTTTG CTGTCAGCTG	180
GTTTGCCGCT TCTGATAAAG CTAGCCCTTG CTGTGTGCAT GCAGGTTATA GTGCCAGGC	240
TCATATTTC TCTTCTTGCT GCACCTCACT CGAG	274

(2) INFORMATION FOR SEQ ID NO:790:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 209 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGGGAAAGGA GGCGGCAGCC AGGCTGTGTC CCCTGACCGT	60
TGGAGCGTCT GCGACCCCGC CATCCCCGCA CCCTCAAGGC ACCTCCAAAG ATGATGATGG	120
GTTGTGGGGA GTCAGAGCTG AAGTCGGCGG ACGGGGAAGA AGCCGCGGCG GTCCCGGGGC	180
CACCCCGGA GCCCAAGTC CCGCAACCG	209

(2) INFORMATION FOR SEQ ID NO:791:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 389 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAGAGAATTA AAGAGAACCA CNAAGCTGAA CCTCAAAAAG TTAGCCTGGC GAGGGGAGGA	60
TGATGAGATT TCCCCTGTTG TCACATAAAC AAGGAAGTAA AGGGGGCCCC TTGTGCTCTC	120
AGAACTCCAA GCATGAAACG ATAGCAAAGG GAAAAACAGC TAAGTGTTTC CTGGCTGAAT	180
TTTATTTTGC TTTAGTTTC TGCCATTTC GTTCCTGTTA TCGTGCTTTG AGGTGCACTG	240
AACTGCAGCA AACCCAGGGG ATCCAAGGCT ACGTTGAAAA GCCTTTGACC ACAGTGCAGG	300
GAGCAGAAGA CATTATGAC GTGATGTCGA CACAGCCCGC ACTCAGGATC CTCCAGGAAA	360
AGAACACAGA GATAACCCCG GAACTCGAG	389

(2) INFORMATION FOR SEQ ID NO:792:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 332 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

```

GTGCTTTGGA TTTTGCATCC AGCTTTTCT CAACACCCCC GCTGGAAGTC AGCGGCTCCA      60
TCTCTTCGCC TTCGGAAGCA CCTGCGTCTC TGTCTCTGAT GCCGAGTGAC TTGTCCCCCT      120
TCACATCTCA GTCTTTTCT CCCTTGTTG AGACATTAC ATTGTTTGAC TCTAGTGATC      180
TGCAGTCATC TCAGCTGTCT CTTCAGTT CCACAAATCT TGAGTTTTCG CAGCTCCAGC      240
CAAGTTCCGA GCTGCCTTA AACACCATCA TGTGCTACC TACCCTTCT GAGGTGTCAC      300
CATGGTCAAG CTTCCCTTCT GATTCTCTCG AG                                     332

```

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

```

GAATTCGGCC TTCATGGCCT ACTGGAATTT CTTTCTTGCC CTTTCATATT TTAAGATGGC      60
TGGAATAGCA CAGGGAGTAT ATAGCAGATA TCTTCTGGA AATAATTCAT CTGAGGATAG      120
CTTTTATTT GCCAATATTG TGCAACCTCT GGCAGAACT GGACTACAAC TCTCCAAACG      180
AACTTTCAGT ACTGTACTAC CACAGATTGA TACTACTGGA CAGTTGTTT TACAGACTCG      240
GAAAGGTCAG GAAGTTCTCG AG                                     262

```

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

```

GAATTCGGCC TTCATGGCCT ACTATGCCGT CATGATAGAG AAGATGATCC TGAGAGACCT      60
GTGCCGTTTC ATGTTTGTCT ACGTCGTCTT CTTGTTGGG TTTTCCACAG CGGTGGTGAC      120
GCTGATTGAA GACGGGAAGA ATGACTCCCT GCCGTCTGAG TCCACGTCGC ACAGGTGGCG      180
GGGGCCTGCC TGCAGGCCCC CCGATAGCTC CTACAACAGC CTGTACTCCA CTTGCCTGGA      240
GCTGTTCAAG TTCACCATCG GCATGGGCGA CCTGGAGTTC ACTGAGAACC ATGAATTCTT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

GCGATTGAAT TCTAGACCTG CCTCCAAGCA GCTGCAGTAT CTCGGAAGAA AAAACGAAGA	60
ATGGGAACCT ATAGCCTGGT TCCTAAGAAA AAGACCAAAG TATTAAAACA GAGGACGGTG	120
ATTGAGATGT TTAAGAGCAT AACTCATTCC ACTGTGGGT CCAAGGGGGA GAAGGACCTG	180
GGCGCCAGCA GCCTGCACGT GAATGGGGAG AGCCTGGAGA TGGACTCAGA TGAGGACGAC	240
TCAGAGGAGC TCGAG	255

(2) INFORMATION FOR SEQ ID NO:796:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

CTAGTCTTCC AACCCCTTCTG GACTTCTTTT GCTCTTGTCT TGTTTTGGGT GTACTGGATC	60
ATGACACTTC TTTTCTTGG CACTACCGGC AGTCCTGTTC AGAATGAGCA AGGCTTTGTG	120
GAGTCAAAA TTTCTGGGCC TCTGCAGTAC ATGTGGTGGT ACCATGTGGT GGGCCTGATT	180
TGGATCAGTG AATTATTCT AGCATGTGAG CAGATGACAG TGGCAGGAGC TGTGTAACA	240
TACTATTTTA CTAGGGAAGT ACTCGAG	267

(2) INFORMATION FOR SEQ ID NO:797:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 185 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

GAATTCGGCC TTCATGGCCT AGGGGGAGTT TAGCTGAAAC AAGTTTACA GAAGCAGAGC	60
TGGCAAATAG TTAATAATT AATTGGTTAC AATAGCAGTT ACAAACAAA TAAACAGTTC	120
CAGGTGCAGG GGCTTAAACT ATCACAAAGA GAGAAATGCA GGGGTTTTGC GTGACATTCA	180
CCGAG	185

(2) INFORMATION FOR SEQ ID NO:798:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 434 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

GGCGGTGTGA CGACTGCTGG GAGAGGAAAG CGAGACATCA TTCCAACCCCT CCAGAAGCTA	60
AAGATCCTGG AACTCAAGGG GAAAACTAAC GTAAGTGCGA AAGCGAACAA GCAAACATGT	120
CCTCAACGGG GCAGGCAGGC TGTCGGGGTA CAGAGCTGGG ATCTGGGAAG GAACAGAGAG	180
GGCCGCTCAG GGAGAGGAAG CACAGTGCCA CCGGAGGCAC GCACTCAGCA GGCACTCGCA	240
GGCTGGGCAG AGGTAGAGAA GCAGCGCTGC ACAGGCAGGC AGCTGACCCA GGGCTCTTAG	300

AGCCGGGCAG GAGAGCTGGT GTGGGACCTG GGAGGAGGAC AGGAGCCTTC AAAGCAGCAC 360
 CGCCTGATTG CAGCCAGGAG GGTAGCATCA AGGAAGATGG AACTGCGGCC AGGCCACATC 420
 CAGGGGTGCT CGAG 434

(2) INFORMATION FOR SEQ ID NO:799:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 424 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAAAAGTCGG ATGCTGGCCT CTGGAAATCA GCCAGATCAA GATATTACAC ATTTCTTCCA 60
 ACAGATCCAG GAGCTCAATT TGGAAATGGA AGACCAACAG GAGAACCTAG ATACTCTTGA 120
 GCACCTGGTC ACTGAACTGA GCTCTGTGG CTTTGGCGTG GACTTGTGCC AGCATCAGGA 180
 CAGGGTACAG AATCTAAGAA AAGACTTCAC AGAGCTACAG AAGACAGTTA AAGAGAGAGA 240
 GAAAGATGCA TCATCTTGCC AGGAACAGTT GGATGAATTC CGGAAGCTGG TCAGGACCTT 300
 CCAGAAATGG TTGAAAGAAA CTGAAGGGAG TATTCCACCT ACGGAAACTT CTATGAGTGC 360
 TAAAGAGTTA GAAAAGCAGA TTGAACACCT GAAGAGTCTA CTAGATGACT GGGCAAGTCT 420
 CGAG 424

(2) INFORMATION FOR SEQ ID NO:800:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 300 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GAATTCGGCC TTCATGGCCT AGGGGTGCTG TGTGTTTTTC AGGGCGCCCT GCGTCCGGCA 60
 GAGGAGGCGA GCATCCCGCT CAGGTGATGA GGAACCCCTC GCGCACCCAG CGCAGAAGGC 120
 TGCTGCCGCC GGACGCCTCC ATTGTTTGAC CACAACAAGG GCCGGATTCT CACCCAGCAG 180
 GATCCTAAGG CCTTTGTAGT CCTTCAGCCA CTGTGGGCCC TGCCTCTGCC TGTTCTTCTG 240
 GAATGTCTTG GGGGTTTTGA TCCTGTCACT GTGACCTGCA AATCCAAGAG ACAACTCGAG 300

(2) INFORMATION FOR SEQ ID NO:801:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 306 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

GAGAAATCAG TGAAGGATTT GCAACGCTGC ACCGTTTCTC TAACTAGATA TCGCGTCATG 60
 ATTAAGGAAG AAGTGGATAG TTCCGTGAAG AAGATCAAAG CTGCCTTTGC TGAATTACAC 120
 AACTGCATCA TTGACAAAGA AGTTTCATTA ATGGCAGAAA TGGATAAAGT TAAAGAAGAA 180
 GCCATGGAAA TCCTGACTGC TCGTCAGAAG AAAGCAGAAG AACTAAAGAG ACTCACTGAC 240

CTTGCCAGTC AGATGGCAGA GATGCAGCTG GCCGAAGTCA GGGCAGAAAT TAAGCACGGT 300
CTCGAG 306

(2) INFORMATION FOR SEQ ID NO:802:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

GCTCGCGGCC GTTCAGAATT ATAAGGCTGT CTGCAGAGAT TTGAAAAATG GCAACAAATG 60
 AAAGTGTCTAG CATCTTTAGT TCAGCATCCT TGGCTGTGGA ATATGTAGAT TCACTTTTAC 120
 CTGAGAATCC TCTGCAAGAA CCATTTAAAA ATGCTTGGAA CTATATGTTG AATAATTATA 180
 CAAAGTTCCA GATTGCAACA TGGGGATCCC TTATAGTTCA TGAAGCCCTT TATTTCTTAT 240
 TCTGTTTACC TGGATGTCTC GAG 263

(2) INFORMATION FOR SEQ ID NO:803:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

GAATTCGGCC TTCATGGCCT AAATAGTTAG TCACCTTCTG ACCTTCTCCT CTTTCTCAAA 60
 GCCTTCTGTC CCTGGTTTTT GCAAGTGCTG CATTTCGCC GAGAATCCGC GTTGCTACT 120
 GCTGCCACCT CCTGTTTATT TAGAACTATG CAAAGACTCC GCTTCCGTTT TCCTGAGCTC 180
 CTCGGGCCCC AGAGTCTCTG TTTGATTATT TATTTATTTA TTTATTTATT TGCCAAAAAT 240
 TCTCCTCTTC AACTTATAGA ATGCACCCAA CTCGAG 276

(2) INFORMATION FOR SEQ ID NO:804:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 580 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

GAATTCGGCC TTCATGCCTA CAGCCATATT AAAACTAAGT AAAGTCGTCC CTGGGAACCT 60
 CACTTTCAGC TTGACTGTAG TAGACTCTGA TGGAGCTACC AACTCTACTA CTGCAACCT 120
 GACAGTGAAC AAAGCTGTGG ATTACCCCCC TGTGGCCAAC GCAGGCCCCA ACCAAGTGAT 180
 CACCCTGCCC CAAAACTCCA TCACCTCTT TGGGAACCAG AGCACTGATG ATCATGGCAT 240
 CACCAGCTAT GACTGGTCAC TCAGCCCAAG CAGCAAAGGG AAAGTGGTGG AGATGCAGGG 300
 TGTTAGAACA CCAACCTTAC AGCTCTCTGC GATGCAAGAA GGAGACTACA CTACCAGCT 360
 CACAGTGACT GACACAATAG GACAGCAGGC CACTGCTCAA GTGACTGTTA TTGTGCAACC 420
 TGAAACAAT AAGCCTCCTC AGGCAGATGC AGGCCAGAT AAAGAGCTGA CCCTTCTCTG 480

GGATAGCACA ACCCTGGATG GCAGCAAGAG CTCAGATGAT CAGAAAATTA TCTCATATCT 540
CTGGGAAAAA ACACAGGGAC CTGATGGGGT GCAGCTCGAG 580

(2) INFORMATION FOR SEQ ID NO:805:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

CAAATTGATT TCGGCACAGT TCTGGGAGCT GGGACATTCA AGGTCACCAC GTTGCCACCT 60
GTGAAGGCCT TCTGCTGCAT CCTCATGTTG GGAAGATCA CAAGTGAGAA CACATGCTGG 120
CCAGTCCTTT CACAGCAGCA TCAATCCGTG CATGGGGCAG GGCCTCGGC CTGAGCGCCT 180
CCCCCAGGCC CTAATCCCA GCACTGCCCT GCTGGGGATG GAATTTCCAA CATGAATCTG 240
GGGGATGCTT TCGGACCACA GCCGGGGAGC CTGCCCTGGC TTCCAGCTGC TGGTGGCCCA 300
GGGGCTCCCT GGCTTGCCCTC GAG 323

(2) INFORMATION FOR SEQ ID NO:806:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

GCGATTGAAT TCTAGACCTG CCATTCTCGC TCTGCCGACG TTGACTCTCT CTCTGAATCC 60
AGTCCCAACT CCAGCCCTGG CCCCTGTCCT GAGAAGGCC CACCACCCCA GAAGCCCAGC 120
CATCTCCAG GGGGCCCTCA TCGCCATCGT CTGCAACGGT CTCGTGGGCT TCTTGCTGCT 180
GCTGCTCTGG GTCATCTCT GCTGGGCCTG CCATTCTCGC TCTGCCGACG TTGACTCTCT 240
CTCTGAATCC AGTCCCAACT CCAGCCCTGG CCCCTGTCCT GAGAAGGCC CACCACCACT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:807:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 556 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

GAATTCGGCC TTCATGGCCT AGATATGAGA AATGAGTGTT GGACGTCGAA GAATAAAGTT 60
GTTGGGTATC CTGATGATGG CAAATGTCTT CATTATTTT ATTATGGAAG TCTCCAAAAG 120
CAGTAGCCAA GAAAAAATG GAAAAGGGGA AGTAATAATA CCCAAAGAGA AGTTCTGGAA 180
GATATCTACC CCTCCCGAGG CATACTGGAA CCGAGAGCAA GAGAAGCTGA ACCGGCAGTA 240
CAACCCCATC CTGAGCATGC TGACCAACCA GACGGGGGAG GCGGGCAGGC TCTCCAATAT 300
AAGCCATCTG AACTACTGCG AACCTGACCT GAGGGTCACG TCGGTGTTA CGGGTTTAA 360

CAACTTGCCG	GACAGATTTA	AAGACTTTCT	GCTGTATTG	AGATGCCGCA	ATTATTCCT	420
GCTTATAGAT	CAGCCGGATA	AGTGTGCAA	GAAACCTTC	TTGTTGCTGG	CGATTAAGTC	480
CCTCACTCCA	CATTTTGCCA	GAAGGCAAGC	AATCCGGGAA	TCCTGGGGCC	AAGAAAGCAA	540
CGCAGGGAAC	CTCGAG					556

(2) INFORMATION FOR SEQ ID NO:808:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

GGAAACTTCT	AAACTATTTT	GCTCGCAACT	TTTACAACAT	GAGAATGTTA	GCCTTATTG	60
TCGCATTTGC	TATCAATTC	ATCTTGCTCT	TTTATAAGGT	CTCCACTTCT	TCTGTGGTTG	120
AAGGAAAGGA	GCTCCCCACG	AGAAGTTCAA	GTGAAAATGC	CAAAGTGACA	AGCCTGGACA	180
GCAGCTCCCA	TAGAATCATC	GCAGTTCCT	ATGTACTAGA	GGAGAGCAGC	GGCTACATGG	240
AGCCACGTT	GCGTATCTTA	GCTATTCTGC	ACACGGTCAT	TTCTTTCTTC	TGCATCATTG	300
GATACTACTG	CTTGAAAGTC	CCATTGGTTA	TTTTTAAGCG	AGAAAAGGAA	GTGCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:809:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

GAGANACGAC	AATGTCCAGG	AAACAGAACC	AGAAGGATTC	ATCAGGATTC	ATTTTGTATT	60
TGCAGTCCAA	TACCGTACTG	GCCCAGGGAG	GAGCTTTTGA	GAACATGAAA	GAGAAGATAA	120
ATGCGGTACG	TGCAATAGTT	CCTAATAAGA	GCAACAATGA	AATTATCCTG	GTTTTCAGC	180
ACTTTGATAA	CTGTGTGGAC	AAACAGTAC	AAGCATTTCAT	GGAAGGTAGT	GCCAGTGAAG	240
TACTCAAAGA	ATGGACAGTA	ACAGNCAAGA	AAAAGAACAA	AAAGAAGAAG	AAACTCGAG	299

(2) INFORMATION FOR SEQ ID NO:810:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 413 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

GAATTCGGCC	TTCATGGCCT	AGTAGCTGTT	CCAGTACAAT	TCAATGTTAT	CCAGGTTGGG	60
TGCATGTGTA	ATGATATTTT	TGTACTTTTG	TATCAACTCA	GAATTCCAG	AGAGCTCTTC	120
CTGGCTGAAA	AGATGTCCAA	GGATCATCTC	CGGAATGGAA	GAGGTGAGGC	CTGTTAGCTT	180
GTGGGCTGCC	CAATCCATCC	AACCCTTGGC	ATTGGGATCA	ATGTTGATGA	GGACAAGACC	240
TTCAACAGTG	TCCGGGTGGT	TAAGAGCATA	TCTCGCCAGG	ATGTAGGCTC	CAGTCCAAC	300

ACCAACTCCA ATTATTGTAG AGAAATTTAG GTACTGCAGG ACGCAAGGGA TCATGTCTGC 360
AAGCTGGTCC AGAGATGGGT ACTGATATCC CAAAGGGAAC ACAGGGGCTC GAG 413

(2) INFORMATION FOR SEQ ID NO:811:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

TTGGTATTGT CTCTGTACTA GTCTTTCCAA ATTCTGCTGT GAGCTTTTTG CTTAGACTGT 60
AAGCCTTAGA GTCACATC ACAGTAATCC TAAAGACAGA T3TTTCTGTT CTATTTGATA 120
AGGCCTTTTT GTGGGTGTG CCGACTGTCA GTTTCATGTT TGTGTTGTTG TTTTGGAAC 180
GCAGTTACAT CCAGGAGACC TGTGGTGAGC ATAATGGGCT GTAGTTGTG CAGTTGTCAG 240
TATAGCTTGT TAGGGAGCTC TTCCTGGGCA GAGTCTTGCA CAGCAGAGCC CAGTGCTGAG 300
CTGAGTTCTT GGCACCATCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:812:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

ACATTTCTTT GTAAGTTNNN AAAAGCCTAT GAGGGTTTTT TCCACGATTC CGTTCACAGT 60
TTGGCTTTTG TTGTTGTGT GGCTGTTCTT GGCCCCCTG GGCCCTGCAG TGGAGTGGGG 120
GGCTGCACCT GGGAGCCTCG AGCTGAGGCC CAGCCCCCTC TGCCCTGCAT TTTCTGCCA 180
AGCAGCACCT GAGACTCTGA AGCCGATGCC TATACAGGCA GAAACCTGCC AATTCCAGCT 240
TGAACGACTG GAGGGTCCTG AGGATGGGGG TCCCTGGGGT GCCATCATGG GCAGGGTGCA 300
TCTGTTTGGG TATGCTGCCC CCCAGCTGGC GGGGCACCGG GGACAGCTCG AG 352

(2) INFORMATION FOR SEQ ID NO:813:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

GAATTCGGCC TTCATGGCCT AGGGAAAGGG AANGTGGGGA GGGTCCGAGG GGAAGGGGAC 60
CCCAGCTTCC CTGTGCCCGC TCACCCCACT CCACCACTCC CCGGTCGCCA GCCGGAGTCT 120
CCTCTCTACC GCCACTGTCA CACCGTAGCC CANATGGATA NCACNGTTGT CAGACAAGAT 180
TCCTTCAGAT TCCGAGTTGC CTACCGGTTG TTTTCGTTGT TGTGTTGTT GTNTTNTTT 240
TTNTTTTNNN TNCGGAAGAC AGCAATAACC ACAGTACATA TTACTGTAGT TCTCNATAGT 300
TNCACATACA TTNATACCAT AACCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:814:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

```
GAATTCGGCC TTCATGGCCT ATCCATTTCC AAATCCACCA AGGTCCAGTC GACAGACATT    60
TCCAAAAAGA ATCCTGTTCT AGGACCACTT GCGCTGAGAG CACACCCGGG GGTCAAAGGG    120
CAGCCACCGG GGGTCAAAGG GCAGCCATCA GGTACTCCCC AGGGAAGGGC TTGCGGCCAC    180
CAGTCACTGC AACCCCGCCT CACCTCCGAT GCCTGCTGTG CCCAGGGTGG TCCCCTCAT    240
AGCGACGGCC TNGCGTNCA TANGACCTCG AG                                272
```

(2) INFORMATION FOR SEQ ID NO:815:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 584 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

```
GATTGAATTC AATGTTAAGC ACCAATGCTG GATTTGGTGG TGGACTGAAC ACCAGTGCTG    60
GCTTTGGTGG TGGCCTAGGC ACCAGTGCTG GCTTCAGTGG TGGCCTAAGC ACAAGTTCTG    120
GCTTTGATGG TGGGCTAGGT ACCAGCGCTG GCTTCGGTGG AGGACCAGGC ACCAGCACTG    180
GTTTTGGTGG TGGACTGGGC ACCAGTGCTG GCTTCAGTGG CGGACTGGGC ACCAGTGCTG    240
GCTTTGGTGG TGGACTGGTC ACTAGTGATG GCTTTGGTGG TGGACTGGGC ACCAATGCTA    300
GTTTCGGCAG CACACTTGGC ACCAGTGCTG GCTTTAGTGG TGGCCTCAGC ACCAGCGATG    360
GCTTTGGCAG TAGGCCTAAT GCCAGCTTCG ACAGAGGACT GAGTACCATC ATTGGCTTTG    420
GCAGTGGTTC CAACACCAGC ACTGGCTTTA CTGGCGAACC CAGCACCAGC ACGGGCTTCA    480
GTAGTGGACC CAGTTCTATT GTTGGCTTCA GCGGTGGACC AAGCACTGGT GTTGGCTTCT    540
GCAGTGGACC AAGCACCAGT GGCTTCAGCG GCGGACCGCT CGAG                                584
```

(2) INFORMATION FOR SEQ ID NO:816:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 481 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

```
GAGAATGTCC AGCAAGGAAG TGAAGACTGC TCTAAAAAGT GCTAGAGATG CAATCAGAAA    60
CAAAGAATAC AAAGAAGCTT TGAAACACTG TAAGACAGTG TTAAAGCAAG AGAAAAATAA    120
CTATAATGCC TGGGTTTTTA TTGGCGTTGC TGCAGCTGAA CTAGAACAAC CTGATCAGGC    180
CCAGAGTGCC TATAAAAAAG CTGCTGAATT AGAGCCAGAC CAATTACTAG CTTGGCAGGG    240
GTTAGCAAAC TTGTATGAGA AATATAATCA CATAAATGCT AAGGATGACT TGCCTGGTGT    300
TTACCAAAAAG CTCCTGGATC TTTATGAGAG TGTTGACAAG CAGAAGTGGT GTGATGTCTG    360
```

CAAGAACTT GTGGATCTAT ATTACCAAGA AAAGAAACAC CTAGAGGTGG CTCGAACATG 420
GCACAAGTTG ATAAAAACAC GGCAGGAACA AGGTGCAGAA AATGAAGAGC TTCATCTCGA 480
G 481

(2) INFORMATION FOR SEQ ID NO:817:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 209 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

GAATTCGGCC TTCATGGCCT AGGGGGAGTG GTGGGTATTG CTAAGTTATC AGTTATTTAA 60
CCTTATGGAG TTTTATTAA CCGTTTTTGT TTGACATGTT TTATATATAT GTAATTTTAT 120
TTATTCTTCA CAAAATCCCT GTGAGGGGGG TGGTACTATT GTCCCATTT AAAGATGAGA 180
ACACTGAGGC ATGTCTAGAA TTCATCGAG 209

(2) INFORMATION FOR SEQ ID NO:818:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 220 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

GGCTCTGTGG AATTCCATGG CATCTTCCCC GCCCCCCCCA ACCCCCCCCT TTCCCCCTTC 60
TTTTTTTTTT TTTCTTTTCT TTTCTCCCT CCCCCCTTT CACCATTTC CCTCGGAGGC 120
GCTTCCCGG GGCAGGGGCA GAGCCGGTCT CCCCCCGC CTCTCCCCGG CCCCCCGCGC 180
CCTATGGCGA GAGGGAGCCC CCTCCAACC CGGGCTCGAG 220

(2) INFORMATION FOR SEQ ID NO:819:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 346 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

GAATTCGGCC TTCATGGCCT ACACATTCTT TTAGTCAGAA ACATTAAAT AGTAGAGTAA 60
GTTGGCTTGA AGTGAATTTT TGTGTGAAAT CTTTCTCTG CCCTAGCCTA GTTGTGCCAT 120
GCACATTTGC ACACAGGAAG AACATTTTGA GACCTGCCAG AATATGCAAT GACAGGGTAA 180
AAAATGCCGG AGGTTGACTG TGTTCATAGA CATTGTGCTA AACACTCAAC ACTCCTGATC 240
ACACTGAATG CTTTGTACAG TCCTGTGAAT TGAGGGCTAT TATTATCCCC ATTTTATATA 300
TGAGCGAGCA GAGGCCGAGA CAGATTAACA AAGGTGCTCC CTCGAG 346

(2) INFORMATION FOR SEQ ID NO:820:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 355 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```
GCTTATACAG TGTCCGATAG ACACCAGGAA GCNACTAGCA GAGAATTTGG TAGTCATAGG      60
TGGCACTTCT ATGTTGCCAG GATTCTCTCA CAGATTGCTT GCAGAAATAA GGTATTTGGT      120
AGAAAAACCA AAATATAAAA AAGCACTTGG CACTAAGACA TTTCGAATTC ATACTCCACC      180
TGCAAAAGCT AATTGTGTGG CCTGGTTGGG AGGGGCTATT TTTGGAGCAT TACAAGATAT      240
ACTTGGGAGC CGTTCTGTTT CAAAGGAATA TTATAATCAG ACGGGCCGTA TACCTGATTG      300
GTGTTCTCTC AATAACCCAC CTTTGGAAAT GATGTTTGAT GTCGGGGAAC TCGAG          355
```

(2) INFORMATION FOR SEQ ID NO:821:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```
GCTCGAGGGC GAAGGGGAGC AATGGCATTT GCGTTGGCCA TCCGTGACAC GGCATCCTAT      60
GCTCGCCAGA TGATGTTTAC GACCACCCTT CTCATTGTGT TCTTCACTGT CTGGATCATT      120
GGAGGAGGCA CGACACCCAT GTTGTTCATG CTTAACATCA GAGTTGGCGT CGAGGAGCCC      180
TCCGAAGAGG ACCAGAATGA ACACCACTGG CAGTACTTCA GAGTTGGTGT TGACCCCGAT      240
CAAGACCCAC CACCAACAA CGACGAGCTC GAG          273
```

(2) INFORMATION FOR SEQ ID NO:822:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 286 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

```
GAGATAAACA AAATTGATTG CCCATTCTC TCACTTCCCC ATCTTGCTCTT CCTAGACCCC      60
ACAGAGTTAA AACTTGGGAT TCCCCTGGCC CCCCAGAAC ACTTGTATAT TGTTTGTTTG      120
AGGTTTCGTGC CGCAGTAACA GACACAGTAT TTAATTGCAC ATACAGATGT TTGCTGGGTA      180
TATTCAGTGT AAATTTTATT TAATCTGTTT TTTGTTTGT TTGGGGGTTA TTTGGGGGGA      240
GTTTGGTTTT GTTTTAAAT ATAAAAAATA AAATCTGTCA CTCGAG          286
```

(2) INFORMATION FOR SEQ ID NO:823:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 297 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

```
GGTCTGGAGG AGGCCCGGAG GGGCTGTGGG TGGACCACTG CAGTAATCTG GGTGAAAGAT    60
GATGATAGGC TAGACTAATA TGGTACCAGA GACAAAGAAG AGGGACTTGA GAGTTATTTA    120
GGAGGAAAAA AACAAAACAA AACAAAAATC AACCAGACTT ACGTTTGTAA ATAGGACAAG    180
TGAGGAAAAG GAGGGTTTCG AGAATAGCTT ATAGTTTTCG AGAAGATGAG GTTGGACAAG    240
ATGCCACTGC TTTTCTTAGC ACTCTCCCT CCCCTAAACC ATCCCGTAGT GCTCGAG      297
```

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

```
GAATTCGGCC TTCATGGCCT ACCCTCATT CCCCAGTGC CTCCTAATGG ATCTGTCCTT    60
ATTCTTCCTT GTTCTGTCTC CCTCATGCC TGGAGCTCCT CTCTTTGGGA CCTCCTCTC    120
CCAAGTCACC ACCCTCTCTC CCCTTCTACC ACTCAGCCAT TCCCCAGTTT CCACAGTTCC    180
TCAAACATTA CCCCCTCCC CACTCCCAG TTTCTCCCC CTCCCCATTT GTCCCCCTCA    240
CCTGGGGGTC CCCGAAGTAG ATCTGCAG      268
```

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

```
GAATTCGGCC AAAGAGGCCT AGATGTGAGC TGGGGAAGGG AGGGTGGCCA GTAATGGGTT    60
TGTTATCAAG CAGGTTTGTT ATCACTGTGG GTGACAAGCC CCTTCCCATT TGGGGCCTCT    120
GGGATCCAGT GCAGAACATA TCCCTCGCAG GAGATGAGGA ACTGGGGTGT TCACAGAGTA    180
ATTCCCTCCC TCACTAGTTG AGGGCTGCCT CTGGGGGTGG CTGAACTACC TCATGCAGCC    240
AGAGAAAGTC CTCAGGCAAT GAAATACAGA CACTGGCCAG CCAGCACTGA GGTGGCGAGA    300
CCTTACTGGC TGGTCCCCAG AGTGTCTGCA GCATTGTGTG AGATCTTAA CTGGCTAGAA    360
GGACGGTAAC AGCAGCACCT GTTTCATAGG ACGTGAAGAT AGACGAGACA G          411
```

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

GAATTCGGCC	AAAGAGGCCT	ACTAAAACCA	TAATTGCTTG	TTTTGCCTG	TATCTGTCTT	60
TTCACGAACA	TTTGTAGTTT	AGCTCTGTCT	TACATTCCCA	TCCCTAAAGA	TCATCAGGAC	120
TTTTGTTTTT	GTGACAATGC	TGGGACCAGA	TTGGCCTTCA	TCATCTCATA	ACACCCCTTAT	180
TTCCTATGGA	AAAGTAAAAT	TGAATTATTC	CAGATATGAT	GACTTTAGGA	TATCCTTTTTC	240
CCTCTGTAC	ATCCTTCATT	GTATTTGTGT	TTTCCCTTTG	GTCTCCAACG	TCCCACCAC	300
CCCCAATCCC	TCCACGACTT	TTAAGCCCTT	GGAAGCCAAC	TTGATTAGTC	AGG	353

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

GAATTCGGCC	AAAGAGGCCT	ACCGTGAGTT	CCCAGGGTGG	CCGGGAGGGG	GAGCTGCGGG	60
GTTACAGCG	GCTCTCTCA	ACGTTCTTGG	CTCCGCTCCC	GACTTCTCAG	CCCTGCCTGG	120
AGGGGCTCAG	CCACTGCTTT	TAGCTGTCTG	CTGGCTTTCC	ACCCTTCCAG	CCTGAACCTT	180
GACTTCCCCA	TGAGGCCTTC	CTGTGGCGGG	GACACTCCAG	GTCGCTGCAC	CCCTTCTCTC	240
CTGAATTTCT	GTAACGACAT	CTAACTTTTA	TTTAATTAAT	TTATTATTTT	AGAGATGGAG	300
TTTCTCTCTT	GTTGCCCGG	CTGGAGTGCA	ATGGCACCAT	CTTGGCTCAC	TGCAACCTCC	360
GCCTCCCAGG	TTCAAGTGAT	TCTCTGCCT	CGGTCTCTG	AGTGGCTGGG	ATTGCAGGCA	420
CCCATCTG						428

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

GAATTCGGCC	AAAGAGGCCT	AAGCGGTATT	TCAGCCACAG	AGTTGGTGTT	GGGTTTACTT	60
ATCTATTTTG	AATTTAAAG	GCTTATAAAT	AAAGCAGTGA	CACTGCTTAC	TGGGAAATGC	120
TGTACCAAAA	AATGTTATCT	TGCT				144

(2) INFORMATION FOR SEQ ID NO:829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 95 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCGGCC AAAGAGGCCT AGCGGACTAG GAGTCAATAA AGTGATTGGC TTAGTGGGCG 60
 AAATGTTATG CTTTGTGTT TGGATATATC TGGAG 95

(2) INFORMATION FOR SEQ ID NO:830:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 610 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCGGCC AAAGAGGCCT AGTGGCTACC TAAATTGAGT ATCTGGCAAG AGTAAGATTA 60
 AGCAGTAATT TGTTCCAAAG AAGAATCTTC TACCAAGGAG CAACTTTAAA GAATGAAATT 120
 AACTTTCTTC TTGGGCCTGT TGGCTCTTAT TTCATGTTTC ACACCCAGTG AGAGTCAAAG 180
 ATTCTCCAGA AGACCATATC TACCTGGCCA GCTGCCACCA CCTCCACTCT ACAGGCCAAG 240
 ATGGGTTCCT CCAAGTCCCC CACCTCCCTA TGAATCAAGA CTTAATTCAC CACTTTCTCT 300
 TCCCTTTGTC CCAGGGCGAG TTCCACCATC TTCTTTCTCT CGATTTAGCC AAGCAGTCAT 360
 TCTATCTCAA CTCTTTCCAT TGGAACTAT TAGACAACCT CGACTCTTTC CGGGTTATCC 420
 AAACCTACAT TTCCCACTAA GACCTTACTA TGTAGGACCT ATTAGGATAT TAAACCCCC 480
 ATTCTCTCTT ATTCTTTTTT TTCTTGCTAT TTACCTTCTT ATCTCTAACC CTGAGCCCCA 540
 AATAAACATC ACCACCGCAG ATACAACAAT CACCACAAAT CCCCCACCA CTGCAACAGC 600
 AACCACCAGC 610

(2) INFORMATION FOR SEQ ID NO:831:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 564 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GAATTCGGCC AAAGAGGCCT AGGAAGAAAC AAGAACAAGA AAAAAGATTA TATTGATTTT 60
 AAAATCATGC AAAAAGTGA ACTCTGTGTT TATATTTACC TGTTTATGCT GATTGTTGCT 120
 GGTCCAGTGG ATCTAAATGA GAACAGTGAG CAAAAAGAAA ATGTGGAAAA AGAGGGGCTG 180
 TGTAATGCAT GTACTTGGAG ACAAACACT AAATCTTCAA GAATAGAAGC CATTAAAGATA 240
 CAAATCTCA GTAACTTCG TCTGGAAACA GCTCCTAACA TCAGCAAAGA TGTTATAAGA 300
 CAACTTTTAC CCAAAGCTCC TCCACTCCGG GAACTGATTG ATCAGTATGA TGTCAGAGG 360
 GATGACAGCA GCGATGGCTC TTTGGAAGAT GACGATTATC ACGCTACAAC GGAAACAATC 420
 ATTACCATGC CTACAGAGTC TGATTTTCTA ATGCAAGTGG ATGGAAAACC CAAATGTTGC 480
 TTCTTTAAAT TTAGCTCTAA AATACAATAC AATAAAGTAG TAAAGGCCCA ACTATGGATA 540
 TATTTGAGAC CCGCCGAGCT CGAG 564

(2) INFORMATION FOR SEQ ID NO:832:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 424 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC	AAAGAGGCCT	ANTCTGTTGA	GATTTCCTCCC	TTTAGTTTCC	AACCTTCTCC	60
CCACCTACTC	ATTTATCCAT	CCCTCCCACC	AACTCATTTA	TCCATCCCAC	CCACTCATTT	120
ATCCATCCAT	CCCACCCACT	CATTTATCTG	TCCATCCCAC	CCACTCATTT	ATCCATCTAT	180
CCCACCCACT	CATTATCTG	TCCAACCCAT	CCACTCACCC	ACCTACTCAT	TTATCCATCC	240
CATTGCTTA	CCCATCCATC	TATCCACCT	AACAATACAT	CCAACCATTC	CCTCACCTAT	300
GCATCTGTCT	GTTGAGCTGT	TCATCCATTC	ATTGATCTTT	CCATCCATTC	ATCCACTCAT	360
TCACACACCT	ACCTACCTAC	CCACCCGCTC	ATTTATTAC	CCACCTACCC	TCTCATCCAT	420
CCAG						424

(2) INFORMATION FOR SEQ ID NO:833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGCCA	AAGAGGNCTA	GTCTACATCA	GCTAACTTTC	CTACAAGATT	ATCAAATTTT	60
ACACAGTATT	TTTCTGTATT	TAATGACTGC	CATGGTCTGC	AAAATTATGT	GATTAGACAA	120
TGAATGACGC	TTAAAGAATG	ATGACCTATT	TTCTAAAGTA	CACTCAAAAT	ATTAACTTT	180
AGAGACAAAG	CAAAATCTAT	CATAAAGTTG	GCTTCTGTTG	ATAGAAACAG	AGAGGTAGGT	240
TAATAATCAC	TGTCCTAAGA	TAAGCNAGAA	TGCTTAGAAA	TAAAGTTGA	GACCCTGCTT	300
CAAAAAGAG	AAGTTGAACC	TTCCAGCCCT	GAGTTTCTAA	TATTACATGA	AAATTATGAA	360
AATGAGCATT	AAGCCAGTCG	CAG				383

(2) INFORMATION FOR SEQ ID NO:834:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCGGCC	AAAGAGGCCT	ACTACGTAGT	TGGAGCTNNT	TCTTCCCCCA	GCAAAGCCAG	60
AGAGCTTTGT	CCCCGGCCTC	CTGGACACAT	AGGCCATTAT	CCTGTATTCC	TTTGGCTTGG	120
CATCTTTTAG	CTCAGGAAGG	TAGAAGAGAT	CTGTGCCCAC	GGGTCTCCTT	GCTTCAATCC	180
CTTCTGTTT	CAGTGACATA	TGTATTGTTT	ATCTGGGTTA	GGGATGGGGG	ACAGATAATA	240
GAACGAGCAA	AGTAACCTAT	ACAGGCCAGC	ATGGAACAGC	ATCTCCCCTG	GGCTTGCTCC	300
TGGCTTGTA	CGCTATAAGA	CAGAGCAGGC	CACATGTGGC	CATCTGCTCC	CCATTCTTGA	360
AAGCTGCTGG	GGCCTCCTTG	CAGGCTTCTG	GATCTCTGGT	CAGAGTGAAC	TCTTGCTTCC	420
TGTATTGAGG	CAGCTCAGAG	CAGAAAGTAA	GGGGCTTACT	CGAG		464

(2) INFORMATION FOR SEQ ID NO:835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

GAATTCGGCC	AAAGAGGCCT	ACTGGGAGTT	CGGAGTGATT	GTTCCTGTT	ACAGGCCAAA	60
AAATTTGTTT	GGTACTTAG	TGGTAGCATT	TTGAGAGGAA	AGTTTACAGA	AAACTAGGGT	120
TATTTTGTGA	TTATGCTTGA	ATTGTCTTTA	TTGTTTCCAA	GGCATCTTTT	TTTTTTCCTT	180
CTAGTTATCA	AGATGTTAGG	TTCTGTGCC	TTGTGGGCCT	TCCCTCTGCC	CAAAAAAAGC	240
ATGGATGAGC	AGAGTAATAT	CATTAAAATG	GCAGTCTTTG	TTAGTTTTTC	TAGAAAAGAT	300
GGTCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

GAATTCGGCC	AAAGAGGCCT	AAGGCAGGTT	TTTTTTTCTA	TGCTTATTGA	TTTAGCCTAT	60
CTATTTATAA	CAGTATAATT	CAGAATATAA	ATATGGAACA	AGTTTCATAA	GGAAGTTTAT	120
CTTTAACTCA	GACATTATAT	CATTAATACT	TCAAATCTCA	TTATACCATT	ATGACCTGAA	180
TGCTACATTT	TTCTTCCTGT	ATGGAGAGCT	TAGGGAAAAA	TTGTGGCCTG	ATGTCTTCAT	240
CCATTCACCT	ATCATAGAGT	ACATAATGAT	CTCAAATATC	CAAAAATGGT	TATATTCAGC	300
TGCATATTTT	TAAGAAAACA	GGCAGGACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

GAATTCGGCC	AAAGAGGCCT	AATTGATTTT	CCATGAGTCT	TGTAATCTTT	GCTCTGCTGA	60
TTGCGTTTGC	CGTCTCTAGA	CCATCTCGCT	TGGAACAAAT	CGCAAAAGAG	GTGAATTCCA	120
GAAGAACGAC	CTGGATTGCA	GAAGAATCGG	CTCCGTTCCG	TGACTATGCT	CGTTTGATCG	180
GTACCCTTCC	AAATACGGTC	CCTCTTCCGA	GTAAGACTGT	CGATGTCGTG	AAGAACCTTC	240
CTGAGAGTTT	TAACGCATTG	GAAAAGTGGC	CGGAATGCAA	GTCCATCACG	GAAATCCGTG	300
ATCAAGGAGA	ATGTGCTTCA	TGTTGGGCAC	TGGGGAGTGG	CGGAGGTGGC	CACGGATCGT	360
CTTTGCATTT	CTTCCAACGG	AAAGGATCAA	TCCCGTCTCT	CTGCCGAGGA	TCTGTTGGGA	420
TGCTGTGACT	CTTGTGGAAT	GAAATGCAAG	GGAGGGTACA	CGGGGAATGG	CCTGGGAGTA	480
TGTACGTCAG	GTGGGAATTG	TGACGGGTGG	AGCGAATGGA	AACAAGGAAT	GGTGTAAATGA	540
GTACGCGTTC	CCGAAGTGCA	GTCACGGTAT	TCAGGGCTCC	TATCCTGAAT	GCTCTTCCAT	600
CCCCCTGAA	GATCCGGAGT	GTTCAACGAC	TTGCATAAAG	GGGTATCCCA	TCCCATATGA	660
TCAGGACCGT	CACAAAATGA	AGTCAGCCTT	CCAGCTGGCA	CTCGAG		706

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

```
GAATTCGGCC AAAGAGGCCT ATAAAAGTCT TATTTTITAC TTTGTCCACT GGAATACATC      60
ATCGTTGGCC TATCATTCCA AACTCCCTAC AGTGTGGCTT CAGCTTATCT CTCTCTGTTT      120
TTTACAGGAA TCCTAAACTC TAACCCAGGG ACCCTCAACA TCTGTGCTGG GTGGACTGTG      180
GCCACATTTT CAGCTGGCCA GTGTAAGGGT TTTAGAGGCC CTTACATGAG AAGAAATACA      240
ATTTTAAAGT CTCTGAGATG ATGTGCTTCT TACATTTTGT GAATTAAAAT GCCTCTTTAC      300
TTATAAAATG CTGGTAGTAA TAGATGGTCA TTATCTCACT GTCATTGTG AAAGAAAAAA      360
CGATTGTAAT AGAATTCTTG CTATTTTITTT TCTCTAAGGG AGGTAAGTTT TCTCCCTAAG      420
CAAACTTTAT GGAATGCACA ATGCTTGGCT TTCACCTTCT TTTATTCTCA CTACCACCGG      480
```

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 589 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

```
GAATTCGGCC AAAGAGGCCT AGAATTAAGG TGTATTATGA GCAGTTGAAG ATATATAGGA      60
AATTTTITCC CAAACCACTA TCTCTGCTCG TTCTATTCAT TCAGTCTGTT TATGTTATTC      120
CTTCATTCAT TCATTTTATA GAACAGTGGA GTGCCTACTG TATGCATCTA TTGTTCTGGG      180
TCCTGGGGAA AGAAAACAAA GTTCCTGCTT TCATGGAAC TACATTATAT TGGCGGAGAC      240
AGTAACAGAC AAACAAATGT AGCCTGTGTA CATGTGTTAC ATGAAAAGCA GGGTAGGGGG      300
CTGGGAGAGA GTAGTAGGGA GTGCTATTTT CGAGGTGGTT GTCAGGAAAG GCCTCACTGA      360
GGAGGTGGCA TTTTGAAGTAG ACCTGAGCGC AGCGGGGGCG TAAGCCAGG CAGCATGTGG      420
AGGAAGAGTG TTCTTGGTGA AAGGAACAAG GATAGAGGCC CGAAGCTAGA GAGCTCAGCA      480
TGATCAAGGA ACAGCAAGCC CCGTGTGGCT GGAATGGAGT GAGCAAAGGA ATGAGCAGTA      540
GAAGGTGAGT GAGTTGGGAG GTCACCAGAG ACCATGGCAA AGACTCGAG      589
```

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

```
GAATTCGGCC AAAGAGGCCT AGGGACTAAC TGCAACGGAG AGACTCAAGA TGATTCCCTT      60
TTTACCCATG TTTTCTCTAC TATTGCTGCT TATTGTTAAC CCTATAAACG CCAACAATCA      120
TTATGACAAG ATCTTGGCTC ATAGTCGTAT CAGGGGTCGG GACCAAGGCC CAAATGTCTG      180
TGCCCTTCAA CAGATTTTGG GCACCAAAAA GAAATACTTC AGCACTTGTA AGAACTGGTA      240
TAAAAAGTCC ATCTGTGGAC AGAAAACGAC TGTGTTATAT GAATGTTGCC CTGGTTATAT      300
GAGAATGGAA GGAATGAAAG GCTGCCCAGC AGTTTGGCC ATTGACCATG TTTATGGCAC      360
TCTGGGCATC GTGGGAGCCA CCACAACGCA GCGTATTCT GACGCCTCAA AACTGAGGGA      420
```

GGAGATCGAG

430

(2) INFORMATION FOR SEQ ID NO:841:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 101 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

GAATTTTAC TTGTCTATAG TCTAGTATTG TTATACCATG TGGTCTTGTT ATAATCATGG 60
 TTTCCATTCT GTGAGTCTTC AGATTATAGG CCTCTTTGGC G 101

(2) INFORMATION FOR SEQ ID NO:842:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 479 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

GAATTCGGCC AAAGAGGCCT AAATGGCGTC GTGGCATTGA GGGGCATCCC TCCTAGAACC 60
 TCCAGGAAAA GCTCGCGGAA GACGAGGTTT TCGCGAGAGA GAGGCTCCAA GCAGTCTGGG 120
 AAGTGTAGTC CAGTTGGCTT AGCAGTAGTT TCGTTGGGGG GGAGCCGAGG TTCCGGGAAG 180
 GGGCTAGGCC GGCTTGAAAA GAGATTATGA CTGTACCTTT TAACTTTGTA GCTGGAACAC 240
 AAGAAGTGTG TGTTTAATGA ATGACGTACA CATTTAAGAT CTGTTTGGAC GCGGAGGATA 300
 ATCCTGTGAA TTGCTAATAG TTTACTGGGT TTGGCCCTTA GTGTTGACTT CAGTATGCTG 360
 AGACGGAAC CAACACGCCT AGAGCTAAAG CTTGATGACA TTGAAGAGTT TGAGAACATT 420
 CGAAAGGACC TGGAGACCCG TAAGAAACAG AAGGAAGATG TGAAGTTGT AGGAGGCAG 479

(2) INFORMATION FOR SEQ ID NO:843:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 270 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

TGGAAGAGCT AACTCGTCTG GCCTTTGAGC TCTTTGCTGA AGAGCAAGCA GAGGGTCCCA 60
 ACCGCTGCT GTACAAAGAC GGCTTCAGCA CCATCCTGCA CCTGCTGCTG GGTTCACCCC 120
 ACCCTGCTGC CACAGCTTTG CATGCTGAGC TGTGCCAGGC AGGATCCAGC CAAGGCCTCT 180
 CCCTCTGTCA GTTCCAGAAC TTCTCCCTCC ATGACCCACT CTATGGGAAA CTCTTCAGCA 240
 CCTACCTGCG CCCCCACAC GCATCTCGAG 270

(2) INFORMATION FOR SEQ ID NO:844:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

```

GAATTCGGCC TTCATGGCCT ACACAGCCAG TATCAGAACC TCAAGAAAAC GAGGACACTG      60
GGGACAGGGA CCAAATTCA GACCACTTTT TTCTCTTGCC TTTCAATAGG ATATTCTGTT      120
AATTGAATTC ATCTGAAAAT CAAGGTCATT GCAGAGAAGT CAGCATTCTA GAGCACAGAA      180
CAGGGCAAAA CAGGACGAAA GATGGATTG GAGACCAAAT GGAGAAGGAA GAACAGAGAT      240
ACGTGTGCTC CAAATATGAC ACCCAACTTC TTTACTCAGA GCAGTTACAT GTCAGATTAT      300
ATTTTAGTTT TTCATTTCTC CTATAGGCAT ACATACTACA AGTCTATAAT AGAAAACTAG      360
TGGCTGGGCG CGGTGGCTCA CGCCTTTAAT CCCAGCACTT TATGGCGCTC GAG          413

```

(2) INFORMATION FOR SEQ ID NO:845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

```

GAATTCGGCC TTCATGGCCT AGGCTCTGTC TACCAAAAAA AAAAAAAAAA GAAAGAAATC      60
TTGCAGTCTG AATACATGGT TGTGTTCTTA AGAAACCTGG TGATAACAAC GACAAAACTC      120
CTCGAG                                           126

```

(2) INFORMATION FOR SEQ ID NO:846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

```

GCTTCATGGC CTAGTTGAAT AGTCAGTTAG AAATGGAAAG AATGAAAGTT GAACAAGAAA      60
GACAAAGCCT TAGAACAAAA GACACAGCCC TAGAACAGAA GGACAAGGCC CTGGAACCAA      120
AAGACAAAGA CTTAGAAGAA AAAGACAAGG CCCTGGAACA GAAGGATAAG ATTCCAGAAG      180
AGAAAGACAA AGCTTTAGAA CAAAAGGGCA GAGACTTAGA GCAAAAAGAC ACAGCCCTAG      240
AACAGAAGGA CAAGGCCCTA GAACTCGAG                                           269

```

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

GCGATTGAAT TCTAGACCCA CCTTCAGACC ATCTCGGAAG ATCTAAAAAG CCTGACCATG	60
GACCCCTACA AACTGCCCTC CTCAAGTGAA CAGGTGATTC TGGACTTGAA AGGTTCTGAT	120
TACAGCTGGT CGTATCAGAC GCCACCCTCT TCCCCAGCA CCACCATGTC CAGAAAGTCC	180
AGTGTCTGCA GCAGCCTGAA CAGTGTCAAC AGCAGTGACT CCGGTCCAG CGGCTCCCAC	240
TCGCATTCCC CCAGCATTCT CGAG	264

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

GAATTCGGCC TTCATGGCCT AGAACATTCC AAATTTCTT GGTTCAATA CCCTTTTTTT	60
TCTTTTGAGG GGAAAAGAGG GGAGAAAAC AGGAGTGATG TCATTCTTTT TTCATGTATT	120
CCAATTAAAG AAACAAGGGC AGGTCGTATA ATGGCATATT AATACATTAG ACTTAATCTA	180
GAACCCCTGT AGCTTTTGA TGTGTTTAT TTCTTATCTC TTTGAATTCC TGTGTTGGTTA	240
CTTGGCTTCC AATGGAGGTG AACTTAACAA CCATACTTGA ATATTCCGTC TTGACTTTGT	300
AAACTGTGGC TACTTGAAAT GAAGTTTATC TGGGTCTCG AG	342

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

GAATTCGCCT TCATGGCCTA GGTTATTCTA TTATTTGTAG CTGAAATAAT TCCTGGCACA	60
AATGACTTTG AAATTTATCT CTGAACATCC CAAATTCATT ATTAGCAAAT ATCAGAAACT	120
TCACATCACT CCAGTCTGTT ATTTACATG GTTTTCTTAG GGCCTGGAAA GTTTTACAG	180
CTGGCTTTTA TTGACTGTGG TGGCTGATAT GCTGAAGAAT GGAGCTCATT GGTTGAGGC	240
TTCTGCCAG	249

(2) INFORMATION FOR SEQ ID NO:850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

GAATTCGGCC	TTCATGGCCT	AGACATGAAT	TCTTTGACTT	GTGCTCATT	TTTCTGAACT	60
TATTGAGGCT	TATATATATC	AAATAAGGTT	AATTTACACA	ATAATTATTT	TTAATAATTA	120
ATAAACTCAT	TCATGTAGTA	TATTTTAAAA	CATTATTTC	TCTCATTTTT	CCTTCTCTTT	180
TTTCTTCCTA	TATATTTTAA	AGGTTTCAAG	AGAAAACGGG	CTTCAGTTTT	TAAAAAAATG	240
TAGACTTGCA	TTTTTACTGT	GCTTATTTAA	AATAATGGAT	ATAATTTATA	TTAAGGTCCA	300
AATTATTTTA	TTACAGGAT	AATCATGGTC	TCTGATAAAA	GATGCCACCA	TTCTGTGTA	360
CTCACAGTTG	TTGTATATTT	TTCAATTCA	ATTTTGAAAG	TAAACTCAAC	ACTCGAG	417

(2) INFORMATION FOR SEQ ID NO:851:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 239 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

GAATTCGGCC	TTCATGGCCT	AGCTAGCTAT	TGTAAATACA	AATAATAAAG	TCTGCATTTC	60
CTGTCTTCTT	TAAGCCTTCA	TTGCCTATTA	AATCATTACA	TTTAGATTA	GATATTATAT	120
TTTGATCATT	TGAGGAACCA	AATTAAAAAT	ATGGAATAAG	TATGGCATTG	AATTATACAT	180
GCCTATTGCT	AATATATTCA	TATTTTATAG	GATTTAATGA	AACAGTCTCC	CAGCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:852:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 489 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

GAATTCGGCC	TTCCCTAGGA	AAGTTCTTCA	CATCAGGAAA	CATTAGATCA	TATACAGAAA	60
CAAACTAAAT	TTGATAAAGT	AGTTATGGAG	TTTTTGCATG	AGTGATGGT	GAATAAATTC	120
AAGAAAACAT	CTATTCGTAA	GCAACAGACA	AATAATCAAA	CAGAAGTAGT	TAAAATAATT	180
GAAAAAGATG	TTATGGAAGG	TGTTACTGTA	GATGATCACA	TGATGAAGGT	AGAGACAGTT	240
CATTGCAGCG	CTTGCAAGTG	GTATATCCCT	GCTTTACATA	GTTTCAGTTCA	GCAGCACTTA	300
AAATCTCCTG	ATCATATCAA	AGGGAAGCAG	GCTTATAAGG	AACAAATAAA	AAGAGAGAGT	360
GTCTTGAAGT	CTACAAGCAT	TTTAAATAAT	CCAATAGTGA	AGGCGCGATA	TGAACGTTTT	420
GTAAAGGGTG	AGAATCCTTT	TGAAATTCAA	GACCATTCTC	AGGATCAGCA	AATAAAAGGC	480
AGACTCGAG						489

(2) INFORMATION FOR SEQ ID NO:853:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

GAATTCGGCC TTCATGGCCT ACTTCACTAA CCTTTTTTGT TTTAAATGA ACCTGCTACT	60
TAAAAAAAT ACACATCACA CCCATTTAAA AGTGATCTTG AGAACCTTTT CAAACCAGAT	120
GGAGCATTGC TTGCAAATTT TTTTCTCTA TGTTCGATG CGCTCGTGTG TGTGTGTCCA	180
GGCAAGAACA CATTTTATAA AAATAAGAAC ACTTGGGCTG GGCATGGTGG CTCATGCCTG	240
TGATCGCAGC TCTCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

GAATTCGGCC TTCATGGCCT ACACAGCTGC AGTCAACATC CACAACCTACC GGGACCACAG	60
CCCCTACTGC TGGCTGGTGT GCGGTCCAAG CCTTGGCGCC TTCTACATCC CTGTGGCTTT	120
GATTCTGCTC ATCACCTGGA TCTATTTCTT GTCGCGGGC TACGCTTACG GGGTCCTCTG	180
GCACAGAACC CCAAGGCGGG CAACAGCAGG GCTCGAG	217

(2) INFORMATION FOR SEQ ID NO:855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAAAATAAA TAAATAACCC ACAGAGCTGA	60
GCACAGGCTT CTTTATGCTT TTCCTTTGGA AGGTGTCCTA GATATATGAT GATTCTTTT	120
TTCTTTCACC TCCTCTTGAT TGTCACAAGT AGCTTGCTTG GCTCAGGAAC AACAGAAGAG	180
AATAAAGAAA ATGACCTCAG ACCTTCCTTA CCTCAGTCTT ATGCAGCGAC CGCAGCCAGA	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:856:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

GAATTCGGCC TTCATGGCCT ACTGTCTCAA AAAACAAACA AACAAAAAGA AAGAAAGAAA	60
AAGGAAAGGT AGACTTATAT AAAATAGACA GTAAAGCATA GGGCAGCAGA AAGGAAAACC	120
TACTCCGCAA AAGTCACTTG TTTTAACTC ATCCAGGAGC TTCCTCTAAG TTCACCTTTA	180
TTTTTACAC GTCCTGGGTC CAAATCCAC CATGCTCTGC CGTATTCTTG CCCTTTGCTC	240
TGTTGTGAA AGAGTCATGA GCGAGCCTC TCTATGGATG GTTCCAATGA GCCACATGA	300
CAAAGCCATC GTCAGTAAGC AGCCACTTCT CGAG	334

(2) INFORMATION FOR SEQ ID NO:857:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 129 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

```

GAATTCCTACT TGATCAACTT AATTCCTTTT CTTTATCTTC CCTCCCTCAC TTCCCTTTTC      60
TCCCACCCTC TTTTCCAAGC TGTTTCGCTT TGCAATATAT TACTGGTAAT GAGTTGCAGG      120
ATCCTCGAG                                     129

```

(2) INFORMATION FOR SEQ ID NO:858:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

```

GAATTCAGC ACCATAATTT GGCCACTCAG CTGTCATCAG GAACTAAGCC AACATTCCTT      60
TTCAGAAAAA GACTTTGGAG AGGGGCAAAC ACTTCTGACA GTCATACTGT GTACTTATTT      120
TAGAAAATAA GCTGCTCTCA GGCTTCAGTA TCCAGTCAAA TATAATATAG AACTCTAGTC      180
TGTTTTGAGT CCTACTACAA TAATATTTTC ACAATAGACT ACCAGTTATG AAGTTCTCAC      240
ATTTTCCCG CATGCTCGAG                                     260

```

(2) INFORMATION FOR SEQ ID NO:859:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 217 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

```

GAATTCCTGT CCCACCTGCT GAATGAGTGC GTGCCAGCTG AACATCAGCG TGGCTTCGTT      60
CTTCAACACA TTTACAAAAG AAGTAAAAAT AAACAGTTTT TTCTTCTCAA TTCTCCTCCC      120
TGCTTTTTTC CTTTGGAACC ACAATCATGC CCCAGTAAGT GCTTTCCTAG GTGAGAGGTG      180
TGTGTCCCAG GTTGAAGGCA AGGCCAGTGG TCTCGAG                                     217

```

(2) INFORMATION FOR SEQ ID NO:860:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 107 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

GAATTCGGCC TTCATGGCCT AGAATATTTT TATCATCCCA AAGCTAAAC ATTAATAAAT	60
TTAAAGTTTA TTCTTAGAGA TTGATGCAAC TTGCATATCT AATCGAG	107

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

GAATTCTAGA CCTGCCTCGA GGGCATCCTT TACTTTTTTT TTTAATTCAG CACAAACCAA	60
ACAAAATTTT AAAATTGAT GAGATTGAA GTTGGACAAA AGTGTATGC AGTTTAAAAA	120
ATTTTTTTTT TTTTTTTGA GACCAGATCT CACTCTGTTG CCCAGGCTAG AGTGCAGTGG	180
CATGATCTCA GCCCAAACCT CTACCTCTTA GGCTCAAGCG ATCCTCCCAT TTCAGCCTCC	240
CAGGTAGCTG GGAGGCTGAA ATGGGAGGAT CAACTCGAG	279

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

TGTATTTTTC CGTGACCTGT TTTCCAGAAT TTATGATATT TCTATGGTTG GTATTCTCAA	60
TTTTGCAAAT GTGCTTGGT GTGGAACCTT TTCATTGTGT TTGCTGGGGA ATTGATGGAT	120
CCTTTGCATC AAGATGCTTA TATTTATTCT TCAGTTCTGG GAAACTTCCC TGTATTATTT	180
GTTTGATAAT TGCTTTCTCT CTGCTTTCTC TTTTCCGTTT TTTGGAATTG CTTGTTTGTG	240
TGTTGCATTA CTGCAGAGAA CTCGAG	266

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

GAATTCGGCC TTCATGGCCT AGTGCTGTGG TAGTTTGTGC CTTTAGAGGG ATTTGTGTAT	60
CTCATATAAT TTAATTTTTT GACATTCAT TTTTACAAT ATTCTGTAG AATCTTTTA	120
ATTTCTGTAA GGTGATATCT ATACTTTCAT TTATGTCTAG TAACTTGAAT CTTCTCTCTT	180

TTGTTCTTTC TCGGTCAAAC TAATAATACG TCAATTTTAC TGATATATCA GAAGAACCAA	240
CTTTCAGTT TATTAATTTT CTCTATTGTT TTTATTTTCA CTACTTATCT CCATGCTAAT	300
CTTTATTATT TCTTCCTTCT GTTACTTTG GGTAAAGTCT GCTCTTTCAC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:864:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

GAATTCGGCC TTCATGGCCT AGCTTACTTT ACAATTCTGC TGTGTGTCAG GTGTCCTAT	60
AGTTTTTTTT AAAGGTATGT TAACTATTTT TCCCTTTTGG TTTATATTG TAGGAATCTT	120
TGCCCTTAAG TGTGCCCGTG CAGAAGAATT ATTTAACATG TTGCAAGAGA TTATGCAAAA	180
TAATAGTATA AATGTGGAGC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:865:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

GAATTCGGCC TTCATGGCCT AGTCACTTGT TCTGTAGAAT ATGTTCAAAT CTGATTTTGT	60
CTTTTGTGTT TCTTGTGTTA TTACCTTGTT CCTCTATCCC CTGTTTTC TGAAAATGAA	120
AGTTAGCTTA GAAGTTTCAT TCCATTCTGG TTCAAAATGC TTAAGTGCTT TATGTCGTGT	180
CATATTAGGA AACACAGTAT CTAGTGGTCC CAATTTTAGT GATTCAAAAA TCAGTCTCTA	240
GGTTCAGAGA TTAATCAGTA GATTCAGAGA TCTCTCCATT GTAAATTTCT TAATTAACCT	300
TTGAATTGCT AATGTTCTGT TCACTGATCG TTGTGGCCCA AATTATTTAT TTCCTAGGG	360
GACTCGAG	368

(2) INFORMATION FOR SEQ ID NO:866:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 144 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

GAATTCGGCC TTCATGGCCT AAGGAGCAGC AGGAACATGG TACATAAAAT CATCCTGCTT	60
CTTATAATGG CAGGAATCAG TGGGATATGG TATTTGTGCA GCATGCTGGG GCATCCACTA	120
GAAAGGCCTG AAGGAAGACT CGAG	144

(2) INFORMATION FOR SEQ ID NO:867:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 268 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

```
GAATTCGGCC TTCATGCGAT TGAATTCTAG ACCTGCCTTG AGCCCCCTCCA CCCCCAAATC      60
CTTCCTCTCC TCCCAGTCCC ACCCCTTGCC CCACGGAGTC CTGGGGACGC AGTGCCCCAG      120
CTGGGAAGAG GGCGGGATCG GGCACCTGGT CCTCCTTGTC CCCGCTTCT TGGGGGCTTG      180
CTACTTTTTC TCTTCTATTG TGTGGCTTTC TGAGTATTTG AACCCAGTC CTGTGTCACC      240
TTCCTTTTTC CTTCGCTGTC CCCTCGAG      268
```

(2) INFORMATION FOR SEQ ID NO:868:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 384 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

```
GAATTCGGCC TTCATGGCCT ACAGAACTAT AATTTATCTT AGTTTAAGCC ACTGGTAAGT      60
GTAATTGTAA TTGTAATTTG TTACATCTGC TATAGTGAAA CTAATACTGA AATTAGAAA      120
AGATGGGTAA CTTATTATGT GGTGAAGTTT AAAAAAGATA AGTAACTCGT TGAAGATCAC      180
ATAATTAGAA AAGAAAGCAG TAGAGCTTGG CCTTGAAGTC AACCAGTGTG ACTCCAGAGC      240
TTGTAGAACA GAATAACCAC CTCCAAGGCC AGCTGAATCT GACCACAGTC TGGTGGAATT      300
CTAGTACATC TCGTTGAGAA GTGGGATTGC CGGAGGGGAG TTGGTTATTC ATGAAGGTGA      360
TGATGTTTGT CCAATGTCCT CGAG      384
```

(2) INFORMATION FOR SEQ ID NO:869:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

```
GAATTCGGCC TCATGGCCTA CTTGGAGAGT TTTGTAAGGA GAGTGGCAAA CATAGCACGG      60
ACTAATGCCA CGAACAACAT GAATCTAAGC CGAAGCAGCA GTGATAACAA CACTAATACT      120
TTGGGGAGGA ATGTGATGAG CACAGCAACT TCTCCTCTTA TGGGTGCTCA GAGTTTCCT      180
AATTTGACCA CACCTGGTAC TACATCAACA GTGACTATGT CAACATCCAG TGTTACTAGC      240
AGCAGCAATG TAGCTACAGC AACAACACTC GAG      273
```

(2) INFORMATION FOR SEQ ID NO:870:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTCGGCC TTCATGGCCT AGGTCAGGAG CCTTCTTGGA GTCCCAATTC TGCATCCCCA	60
AATGATAAAG ATGGGGTGAA GGAACTGAGA GCCATGAGTT GGAGAGTCCT CTTGCTTGAG	120
GTCCCTGAGA ATGTGGTCCC GGAGTATCCG GATCACTGGA AGCCAGGACT TCAACGCATT	180
GGGTAGTGAG GGATGGAGGG AGGGGCTGGA CGCAGAAGCA GGATGAAGTC TGCTGGGTGT	240
GAGCTCCAA GGAGGTAGAA CAAAGAGGGC AACTCGAG	278

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 270 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCGGCC TTCATGGCCT ACCAGACTCC CATAATAATA AACCTGGTA ATAAACAAAG	60
GAAGTCTTTC CAGTTTCAGT GTATCAACCA CCACGTACCA GATAAAATCT TATTTACCT	120
TTCACAATTT ACCAGTGTG GGCTGTGAAT TAATATTTT ATTTTCTGT GCATTCATAA	180
ATTAAGATTA TTTTATTGTA TTGTAAGTGT AATTTTGAGA CTAAAGTCTA AAAACAAGAC	240
ATCATGAAAT GGAGCTGGAG GATACTCGAG	270

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 339 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GGTTTAGAAA GGGCACAAAC AGTGCAAACC TGTTTCATGAA CCTTTACATG TCATGAACAG	60
GGCAGAAATGC TTCAGGAAAG AATTGTCGAA AGTAAAAAAG CAAATAATGG ATGCAGCTTA	120
TTCTAGTTAT TGAAGAATCC AACGGGATGG AAGCTAAATG TAGCACATGG CATGGGCGAT	180
GTCTCAACAG TGAGTGGGAT AACAAGTCGT TTTAATGGTT CAGGGCCAAT AACCAGGGGAG	240
GGTGAGGAAC GGCATCTCTG TTTTGAGTAA ACAAGAGTGA TTTCCTTCCC TGACACTGAA	300
AAATGAAACC TTTGGGGAGA TAGAGGAAGC GATCTCGAG	339

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 245 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC TTCATGGCCT AACCTTTAAA CCCTAAAATC CAGGAAAAGA AAATAAATAC	60
ATTATCATGG ACCTGAGGGA TTTTACCTG TTGGCTGCTC TGATTGCCTG TTTAAGGCTG	120
GATTCCGCAA TAGCTCAAGA ACTTATTAC ACTATTAGAG AGGAATTGCC TGAAAATGTG	180
CCCATAGGAA ACATACCAA GGATCTGAAC ATTTCTCACA TCAATGCTGC CACAGGGCCA	240
CCTCG	245

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTCGGCC TTCATGGCCT AGTTTCTTC ACTGGCATT CACAAATTAA GCCATTGCTG	60
CCTCATTAGC CTGTATTTT GTGTGCATAT CATATATCCA GACCTGTATG TTCATTAA	120
GCATTCTTAT ATCACACTGT CTCCTCATCT ACCATATGGT AAATGTTAA ACTCCACATT	180
TGTCTGCATC AGGGAAAATG CATGGGCACA CATCCTCCCC CCCTTCCCTC GAG	233

(2) INFORMATION FOR SEQ ID NO:875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

GGACAGGAAG TCAACTTCAA GCAGATTGAC TTGAAACGGG ATCTCATTTA GGAAGCATAA	60
GTGTCCAATC AAAAAGTGTG TATTTTTTTA AATTGGGAAA ATACTCAAGT TCCAGTTGCT	120
TATCATTCTC CTTCACTTTC TGAAAACCTG GCAATCCCAT GTGGACTTCT GGTAGAATGA	180
GCAATGCAAA GAACTGGCTT GGACTTGGCA TGTCTTGTA CTTCTGGGGG CTGATGGACC	240
TTACGACCAC CGTCTCTCG GACACCCAC ACCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:876:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

GAATTCGGCC TTCATGGCCT AGTCCTCAA TTAGTTATTG CATTATTTTC AAGTATTGTA	60
TTATCATTTA TTGATATTGG TAGTGTTC TAAACAGGA AATACATAAT TTGGCATCCT	120
TATTCTTAGT TTTATACCTA AAGAACCTAG TAACTCACAG GAGAACGTAG TAACATTATC	180

ACTTGTTAAT CAAGCTTTCA GTGAAACAGT TTATCAAACC ATTTTITTTA TTTTGATTCA 240
GCAATTTGT CAACTAAATT TAATTTAAAA GTAGAGGTCC AAAGCTCGAG 290

(2) INFORMATION FOR SEQ ID NO:877:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 260 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

GAATTCGGCC TTCATGGCCT ACTCAAATTG GAAAGAAAGA TTCCTTGAGA CTTACTTTTA 60
AAATCTAAAG TGTGAGGNN A CANCAGAGT AAAGNCCAGA CTCATTNNAC CTTGATGTC 120
TGCATAGATC CAGNAGTTGT ACATTTTACC TAACAACATC ACTTTTGTTG AACATTCCAA 180
CTCCAGAAATG ATCCCCAATC ACCCTAATCT CAGAATGCTG GAATGATGTC TGTGGGCAA 240
CCCAGGACTC CACACTCGAG 260

(2) INFORMATION FOR SEQ ID NO:878:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 180 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

GAAGCGACCA TTCGTCCAAC AGGTATGGCT GGTTTTGTG CAATGAGAGA ATGTCCACTC 60
GCAATGATGA GCCTGAGAAG GCAAGTCGTC CGTTTGATGT GGATCGCGAT GGTTTTGTTA 120
TGGGTGAAGG TGCCGGGATT CTTATTCTGG AATCACTCGA ACATGCTGAG AAACGTGGAG 180

(2) INFORMATION FOR SEQ ID NO:879:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 497 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

GAATTCGGCC AAAGAGGACT ACACAGAGCC CCTGTTTGGG AATTGAGAT TCTGTGTCAT 60
GCTGGTTTTT CTTTCAGAAT TGCTTGAAAT CGAGTTCTCT TAGCCACTGG ACACCTAGTT 120
TTCAGGAGAA TGTCCCAAGA TTGTTTATAT ATACAAAATG GCAAAAGTAC TGTTTTTCGA 180
ATTGATAATT CAAGCAAAGG CTTCTCTTTA CTGTCACTGA TTTTITTTTG TTTTATTTT 240
GTTTCCTTGT TTCTATTTCC TTGAAGCTTT GAAGGGAGGA GAAGCAGAAA ATTTTGTTTA 300
TGTTTGTTAA AAATCAGAAC TACTTAATGC TTTTGGCCAC AGCATATTTT CTTGCCTGTT 360
GGAGCCGTTA GGAAGATTAC CTATGTCCTA ATCTCAACC TGAGAAGATT TTTGACTCTT 420
GTGTCTACTG TTGATTGTTT GCTTGAGTTC TCAAAGACCT GTGGCCAGGT ATTTTAAAAA 480
GTCGTCTATT TCTCGAG 497

(2) INFORMATION FOR SEQ ID NO:880:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

```

GAATTCGGCC AAAGAGGCCT AGCAAAATCA AATTCAACCC ATGAGTCACA GTGCTTTCTT      60
CAACAAGAAA ACATTGAACA CAGAAAGCAA TTGTGAATAT AAGGACCCTG GGAAAATGAT      120
TCGCACGAGG CCCACCTTG CTTCTTCACA GAAACAACCT CAGAAATGTT GCTTATTTAC      180
AGAAAAGTTG AAGCTGAACC TAGAAGTGAA CGGTCAGAAT GAAAGCAATG ACACAGAACA      240
GCTTGATGAC GTTGTGGGT CTGGTCAGCT ATTCAGCCAT AGCTCTCTG ATGCCTGCAG      300
CAAGAATATT CATAAGGAG AG                                     322

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(2) INFORMATION FOR SEQ ID NO:881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

```

GGCCACCTG TGTCTGGTT GAGGGTCTCC AGGGTTCTTT GGGGCCGAG GCCAATGGTG      60
GCAGAGCTA CATAGAACTA TGCTTCGTGG TGTTCCTGGG AAAACCTTTC GACTTGTGTTG      120
CTATACTATT CAATATGGCT GTATAGCTCA TTGTGCTTTT GAATACGTTG GTGGTGTGTTG      180
CATGTGTTCT GGACCATCAA TGGAGCCTAC AATTCAAAAT TCAGATATTG TCTTTGCAGA      240
AAATCTTAGT CGACATTTT ATGGTATCCA AAGAGGTGAC ATTGTGATTG CAAAAAGCCC      300
AAGTGATCCA AAATCAAATA TTTGTAAGAG AGTAATTGGT TTGGAAGGAG ACAAATCCTT      360
CACCCTAGT CCATCAGATT TCTTTAAAG CCATAGTTAT GTGCCAATGG GTCATGTTTG      420
GTAGAAGGT GACAATCTAC AGAATTCTAC AGATTCCAGG TGCTAGGCCT CTTTGGCCGA      480
A                                     481

```

(2) INFORMATION FOR SEQ ID NO:882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

```

GAATTCGGCC AAAGAGGCCT AGGGAAGAGT GGAACAAAAG TCAGTCGTAC ATTCAGCTAC      60
ATCAAGAATA AAATGTCTAG CAGCAAGAAG AGCAAAGAAA AGGAAAAAGA AAAAGATAAG      120
ATTAAGGAGA AGGAGAAAAGA TTCTAAAGAC AAGGAGAAAAG ATAAGAAGAC TGTCAACGGG      180
CACACTTTCA GTTCCATTCC TGTGTGGGT CCCATCAGCT GTAGCCAGTG TATGAAGCCC      240
TTCACCAACA AAGATGCCTA TACTGTGCA AATTGCAGTG CTTTGTCCA CAAAGGCTGC      300
CGAGAAAGTC TAGCCTCCTG TGCAAAGTC AAAATGAAGC AGCCCAAAGG GAGCCTTCAG      360

```

GCACATGACA CATCATCACT GCCCACG

387

(2) INFORMATION FOR SEQ ID NO:883:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 443 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

```

GAATTCGGCC AAAGAGGCCT AACGCAGCCA TGGCTCGTGG TCCCAAGAAG CATCTGAAGC      60
GGGTGGCAGC TCCAAAGCAT TGGATGCTGG ATAAATTGAC CGGTGTGTTT GCTCCTCGTC      120
CATCCACCGG TCCCCACAAG TTGAGAGAGT GTCTCCCCCT CATCATTTTC CTGAGGAACA      180
GACTTAAGTA TGCCCTGACA GGAGATGAAG TAAAGAAGAT TTGCATGCAG CGGTTTCATTA      240
AAATCGATGG CAAGGTCCGA ACTGATATAA CCTACCCTGC TGGATTTCATG GATGTCATCA      300
GCATTGACAA GACGGGAGAG AATTTCGTC TGATCTATGA CACCAAGGGT CGCTTTGCTG      360
TACATCGTAT TACACCTGAG GCGGGCATAA CACAGCAAGA CGAGAAGACC CTATGGAGCT      420
TTAATTTATT AATGCAAACA GTA                                           443

```

(2) INFORMATION FOR SEQ ID NO:884:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 353 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

```

GAATTCGGCC AAAGAGGCCT AAACATCATT TGTACTCTAA TCCAATCAAA GAAGAAATGA      60
CTGAGTCTAA GTTCTCTAAG TACTCTGAAA TGAGTGAGGA AAAACGAGCC AAACCTTCGTG      120
AAATTGAGCT CAAAGTTATG AAGTTTCAGG ATGAATTGGA ATCTGGGAAA AGACCTAAAA      180
AACCAGGCCA GAGTTTTCAG GAGCAAGTAG AACACTACAG AGATAAACTT CTTCAACGAG      240
AGAAAGAGAA AGAGTTAGAA AGAGAACGAG AAAGAGACAA GAAAGATAAA GAAAAATTGG      300
AATCTCGCTC CAAAGACAAG AAGGAAAAAG ATGAGTGTAC TCCGACAAGG AAG           353

```

(2) INFORMATION FOR SEQ ID NO:885:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 475 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

```

GAATTCGGCC AAAGAGGCCT ACAATTTTTT GCCTTTTAC CCTTCTGTCC TTAAATGCCA      60
TCTCTTTCTC AATTATTTTC TCTCATTTT TTTCTGAGCA GACTTATACA AAAAGGAACA      120
TAAATTAAAT TTGCCAAATA TCAAAGAGA GGAACTTTT ATTTTTTATT TTTTGGAAAC      180
GGAGTCTCAA TCTGTCTCCC AGGCTGGAGT GCAGTGACGC AATCTCAGCT CACTGCAACC      240
TCCGCCTCCC AGTTCAGAG ATTCTCTGCC TCAGCCTCCC GAGTAGCTGG GATTACAGGT      300

```

ACCTCTACC ATACTCAGCT AATTTTGTGTA TTTTGTAGTAG AGACTGGTTC ACCATGTGGG	360
CCAGGCTGGT CTCGAACTCC TGACTTCAGG TGTCTGCCT GCTTTGGCCT TCCAAAGTGC	420
TGGGATTATA GCGTGAGCC ACCACTCTCC ACTGAACTTT TTAATCTTAG AGCAG	475

(2) INFORMATION FOR SEQ ID NO:886:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 484 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

GAATTCGGCC AAAGAGGCCT AGGGGTGTTA ATTAGCTCAG CTGTAGCAAT CATTTCATAA	60
TGTATATCAA AACATCCAC TGTATACTTT ATACTTTTTT ATAAAAATAA ATATTCTTAC	120
AAAAGGACAG GCGCTGTGTC TGTCTGGCTC ACCATTGTAC CCAATACCCA ACAGGGTGCC	180
AAGTACCCAA TACCAACAG GGTGCCAAGG AACACAAAAG GCACTCAAAA TATGTTTGT	240
GATTGGAGTT TACAAGGAAG AAAGGTATTT TCTTATCCCT CTCTTCCCTT CCCACCCAAA	300
CATAGCTTCT TCTAAGAAAA GAACTGAGG CTGGGCAAGG TTAAAAGCTA GCTCCTGGTA	360
CTTTTGCATC CACTCAGT TTACCTGTGC CTTAAACCAG ACTTCATCAA ACTTCAGTCT	420
TCACAAGTCA CTTACCATT TTTGCTCTAC CTACTACTG CCTGTGTAGG CCTCTTGGC	480
CGAG	484

(2) INFORMATION FOR SEQ ID NO:887:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 184 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

GAATTCGGCC AAAGAGGCCT AGTGGGACAT AAGGCTGGAA GGTAGCACAC ACAGCACCAT	60
ATTCTTTTTT ACTTGCAATG GAGTTACTTT GAGTGCTTTT CTCTTTACCA AATATATGAG	120
TTCTATTACT ACATTCCTTT TCTTTGTTTG TTTTAGTGAG ACAGGGTCTC GTTCTGCCTC	180
CCAG	184

(2) INFORMATION FOR SEQ ID NO:888:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 78 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

GAATTCGCCC AAAGAGGCCT AGTTTGCAC TTACTTTTAA TTTCAAATCA GCTGCAGATG	60
TTTGGGAGCC TTCTCGAG	78

(2) INFORMATION FOR SEQ ID NO:889:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

```

GAATTCGGCC AAAGAGGCCT AATGGAAGAT ATGCTGAAAG ACTTTCTCCT TGGAGAACAC      60
TTATTATTGG TTGGCAACCA GGGTGTAGGA AAAACAAGA TTGTTGACAC ATTCCTTCAC      120
CTGCTCAACA GACCCCGAGA ATATATTAG CTACACAGGG ATACCACAGT ACAAACTCTT      180
ACGCTTCAGC CTTCGGTTAA AGACGGACTT ATTGTATATG AAGACTCACC TTTGGTTAAA      240
GCAGTAAAGT TGGGTCATAT TCTGGTAGTA GATGAGGCTG ACAAAGCTCC AACAAATGTC      300
ACGTGTATT TAAAACTCT AGTAGAAAAT GGAGAAATGA TTCTAGCAGA TGAAGACGC      360
ATTGTTGCAA ATTCTGCTAA TGTGAATGGA AGAGAAAATG TTGTAGTGAT TCATCCTGAT      420
TTTAGGATGA TTGTTCTGGC AAATAGACCT GGATTCCTT TCCTAGGCAA TGATTTCTTC      480
GGTACCTTAG GTGATATTT TAGCTGCCAT GCAGTTGATA ACCCAAACC CCACTCGGAG      540
CTCGAG                                         546

```

(2) INFORMATION FOR SEQ ID NO:890:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

```

GAATTCGGCC AAAGGGCCTA GAGATTTTCT GTATTTCTCT TCACTTCCAA GAGAGTGGAT      60
AGAATGGAGA AATCTAGATT GATCTTTACA GCTCCAGATA AAGGGACTAA AAATATTGGT      120
TTAAATATTT AAAGGTTAAA GAAAGAGACT GTTGTTTTCT TTCAAAGTGA TTTAAATTTA      180
AACTAGGTTT TTATTACTAA GTTTTGGAAA TGGGGTAACC ATTTTCTTCT CATATCAAGG      240
ATATGTACAT ATTTCCCAT TCCCATAAT TAAAAACAAA CAACTCCCAT CCACTTCTTA      300
TAAATAGTTC TTAAGTTGGG CTTAGTAACA ATGTATATTG TGCCAGTAAT ACAGAAAAGG      360
TGGGAGTATA AAGACCATCC TGTCTGTATA GAATCCTATA GAACCAAGGT GCTGGATTAT      420
GGTGGTT                                         427

```

(2) INFORMATION FOR SEQ ID NO:891:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

```

GAATTCGGCC AAAGAGGCCT AATTTTATTG AAAGTCTTA TGTATGTCAA AGGAGCCAC      60
AACTTCAGCT ACACAACTTT TTGTATTGAA AGAACTCATA CTTTTGTAG CTTTTATTTC      120
ACATTTAATT TAAAGTGACT TTTAGCACTA AAATGCCTAG AAGATTTTAC TCCAGACCTA      180
TAAGGAAATG TTTAGTTTTT ATGAAAATG ACAAGTCGAT GGTAAACTT CTCATGTCTT      240
TGGTGCTTTG GCCCTAATAG CACTGGACAA CACCACGACC ACATGGAAAC ATATTTTGTG      300

```

AAGCAAACT TTAATTTTAT ATAACGTATG CTATGGAGAA CTCGAG

346

(2) INFORMATION FOR SEQ ID NO:892:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 95 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC AAAGAGGCCT AGTGGAGAGT GAAGCTTAAG ACTGCAATTG CAGAAAAAGT
CCATGAGGAG AGAAGAAGGA GAAAAGGGG AAGAG

60
95

(2) INFORMATION FOR SEQ ID NO:893:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 424 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

TTTTTTTTTT TTTTTTTTAA ATACTTCGCA TACTCTCCAA TGCCCAAAAA TAGCAAGGTG
GTAAAAAGAG AATTAGATGA TGATGTTACT GAGTCTGTCA AAGACCTTCT TTCCAATGA
AGACGCAGCT GATGATGCTT TTAAGACAAG TGAACATAAT GTTGATGGCC AGGAAGAGAA
AGATACAGAT GTTGAAGAAG GATCTGAAGT CGAAGATGAA AGACCAGCTT GGAACAGTAA
ACTACAATAC ATCCTGGCCC AAGTTGGATT TTCTGTAGGT TTAGGAAATG TGTGGCGATT
TCCATACCTA TGTCAGAAGA ATGGGGGCGG TGCAATATCTT TTACCATATT TAATACTACT
TATGGTAATA GGTATTCCTT TTTTTTCTT GGAAGTCTCT GTGGGTCAA GAACCACTCT
CGAG

60
120
180
240
300
360
420
424

(2) INFORMATION FOR SEQ ID NO:894:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 390 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GCCAAAATCA AGCAAAGTAT GAAGAAAGAT AAAGAAGGGG AAGAAAAAGG GAAGCGAAGA
GGATTCCCCA GCATCCTGGG ACCCCACCGG AGACCAAGCC GTCATGACAA CAGTGCAATT
GGCAGAGCCA TGGAAGTACA GAAGGCGCGC CACCCTAAGC ACTTATCCAC ACCCTCATCT
GTGAGTCCTG AACCTCAGGA CTCTGCCAAG TTGCGCCAGA GTGGGTAGC AAATGAAGGA
ACAGACGCTG GATACCTGCC TGCCAATTCC ATGTCTTCTG TAGCTTCAGG GGCCTCTTTT
TCCCAGGAAG GAGGGAAGA GAATGATACA GGATCAAAGC AAGTTGAGA AACATCAGCA
CCTGGAGACA CCTTAGATGT CACCCTCGAG

60
120
180
240
300
360
390

(2) INFORMATION FOR SEQ ID NO:895:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 595 base.pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```
GAATTCGGCC TTCATGGCCT AGTAGCTGGT ATTTATTCCC CAAAGTAATA ATGTTGAAGT    60
ATGGGTCTCA TCATTCCCAT ACACAGAAAC ACAAACACT TTGATCATAA ACTTTTCTCT    120
TCAGAAGCCA AACTAACTTG CAGAATAATA GAGCCACTGG TTTAATGTTT CCTCAAGATA    180
GGTTTTAGTG TAAGCTAGTA TTCTGTGTGT TCGTAGAAAT GATTCAATAC CTGCAGCTGG    240
TGAATTAGGA ATTGTATTG TTGCCTTTTT TATATTAGAT GAGGTGCAAA AATTTTAATG    300
CTAGTCAGTA TGCACCACCA CAGGAAAGTT AGATCCCAT AGCACTTGAA ACTACAGCTT    360
TGGAAGCTTA GGCTAAGTTA ATTTGGATTT GTTACTTGAT TCACCTACTG ACCTTTCTCT    420
TTGTTTGAAG TGCTTATCAG CATAATGAGC TAAGTGTGAT GCATATTTGT GAAGAAACAC    480
CCTTTTGGT CCCTTTGGG ACAGAGAGGT ACTCCTTGAT CTTTATGAAT GACAGGTTAC    540
TGTTTGCCT TATTGCTTAA CTTAATGTAG TGAAATAAAG CAGACGAGGC TCGAG        595
```

(2) INFORMATION FOR SEQ ID NO:896:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 341 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```
GGCTGATCCG CGTGAACATG GAGGACTTGC GAGAGCAGAC TCACACCCGC CACTATGAAT    60
TGTACCGACG CTGTAAGCTT GAAGAGATGG GGTTCAGGA CACTGACCCCT GACAGCAAAC    120
CCTTCAGTCT TCAGGAGACA TATGAAGCAA AAAGGAATGA ATTCTGGGA GAACTGCAGA    180
AGAAAGAAGA AGAAATGAGA CAAATGTTT TTATGAGAGT GAAGGAGAAA GAAGCTGAAC    240
TTAAGGAGGC AGAGAAAGAG CTTACGAGA AGTTTGACCT TCTAAAGCGG ACACACCAAG    300
AAGAAAGAA GAAAGTGAA GACAAGGAGA AGGAGCTCGA G                341
```

(2) INFORMATION FOR SEQ ID NO:897:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 382 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```
GAATTCGGCC TTCATGGCCT ATGCCTTAAT TTTGCTGTTT GCCCTCGGAT CTCTGGGTTT    60
GATTTTTGCG TTGACTTTAA ACAGACATAA GTATCCCCTT AACCTGTACC TACTTTTTGG    120
ATTACGCTG TTGAAGCTC TGAAGTGGC AGTTGTTGTT ACTTTCTATG ATGTATATAT    180
TATTCTGCAA GCTTTCATAC TGACTACTAC AGTATTTTTT GGTTTGAAGT TGTATACTCT    240
ACAATCTAAG AAGGATTTCA GCAAATTTGG AGCAGGGCTG TTTGCTCTTT TGTGGATATT    300
GTGCCTGTCA GGATTCTTGA AGTTTTTTTT TTATAGTGAG ATAATGGAGT TGGTCTTAGC    360
CGCTGCAGGA GCGCCACTCG AG                382
```


(2) INFORMATION FOR SEQ ID NO:898:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 422 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

```

GAATTCGGCC TTCATGGCCT ACGAGCCTCA CATCACTTGT ACAAGCCACC TGGGAGAAGT      60
GGCCCTCAGG AAGATCCTAA AACCAATACA CAAATACAAC TTTTCATTT CATTAAATACA      120
TCAAGTTCAT ATAAGAGTCA AACAGGTAAA AGCAGCATCC CAAACTGTTT TCTCCTCGTA      180
CATGTCAGTT CCACGATCCT CAGTCTCATA AAGTCAGGGA CTAGAGACCA ATGTAATTAT      240
CAATACGTAC CTGCCTTTGA GTGAACCTTC AATGCCAACT AGGAAGGGCG CTTCCAAAAC      300
GACGTTATTT GTAACCTCCTA GGAAGACAAA CACGGGTCAG AACCCATACT CTGCGGGCCT      360
TGAAATGGAA AATCTCTCCT CTAGACAGAC TCATCCTGGC CGTAAATATC AGGAGACTCG      420
AG

```

(2) INFORMATION FOR SEQ ID NO:899:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 806 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

```

NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      60
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      120
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      180
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      240
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      300
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      360
NNNNNNNNNN NNCNTTGCAN GNTTGGTTC CNTTTNTTCC TTGTTTNTTT TTTTGCACAA      420
TATTTCAAGN TTTACNAGGC ATACATCAAT CCAAGTTCGG AATTTTAATT AAGAATTCGG      480
CGTTCATGGC NTAAAAGAAN TTGATGCTAC CCCCAGGAAAT GCCAGAAGAG GANATACATT      540
GAAATAGACN GTGATGAAGA GCCCAGGGGT GAATTACTTT TTNTTCGGGA CANTGAACGC      600
NTTCATAAAA AGCCAAAGTC TGACAAAGAG ACAAGAGTNG CAANTNCAAT GGNTGGANAG      660
ACAGACCGAA AAGAATTNTT GAGGAAGAAA ACCAAAACAA ATCCATNNTC CAGNTCGACA      720
AATNAAGAGA AGNAAANACA GAAGAACTTT ATGATGATGC GGTATAGCCA GAATGTCCGG      780
TCAAAAAATA AGCATTCTCT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:900:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

```

GAATTCGGCC TTCATGGCCT AGGAGGGCCT GTTTCAGAAT TGCTTTAATA GTTCCCTTCC      60
AGTTGAATTT ACCTTTTGCA GGAGCCTCAT CGTCTTCTGG TTCTCCGCCC TCAGGATGCT      120
CTGGGAGCTT CATCTTTTTC TTCTTAGAAT CTGTTTCAAC TTCCGAGTGC CTCCGCTTCC      180
TCTTCCCTGC CCCACGCGTG CCTCTTCCTC ACTGGCGCTG TCCTTGCGCT GCTTCTTCTT      240
CTTGCTCCTC TTCCCTGCAG AGCCATTGGC CTCAGGGACT TCCTCCCCAC CAGCCTCAAG      300
GTCAGCCTCC TGCCTCGAG                                     319

```

(2) INFORMATION FOR SEQ ID NO:901:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

```

GAATTCGGCC TTCATGGCCT AAGAAAAGAC AAGGTCCCCA TAAGAGTGGC GAGAGGAACA      60
GAGCCAGGAC ATCGGAAAGC AAGCCCCTGT GTTCCCAAAC CGCAGAAGAG GGAGCTCTGA      120
TGTTAGACAA GCCACCCTCC TACAAGCGAA GGGAAAGTAA CTTTGAGCAA AAATGAGCAA      180
CAGAAAATGA GATCAAGGTC AGATCTCATA CAAAGTTGCA AGATGAAAGA ATGAGCAGCA      240
GAATAACCTC CCTGTGATGT GGAAAGTGTG CCAGGAAAAC AGACCCAAAC GCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:902:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 429 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

```

GAATTCGGCC TTCATGGCCT AGGGGTTCTT TCTCTGCAC GATGCCAGGT GGTACTGGAA      60
TCTGCTGAGT GGGATTCCGT GGTGAGGATC ATAAGGGCAA ATTTCAAAGG CTTCTGGCTC      120
CATGAGAAAT TCTTGAAGCA GGGTATCTCA CTGCTAGAGT CTAACGGAAA TGCTTCTTGT      180
GGAGAAGCCC TTTTGTAAGA AGGATGGAGT TGTCTCTGTC CCAGTTTGG CCCTTGGGAT      240
TCTGTAGGTG ACGGTCTTAA CTGTGGTCT GTTCTCTAGG ACTGTGAGTG GTGGATTAGA      300
AGAGAGATGA GGAGCTGCCA AAAGCAGCTA CACAGAGAAC AGAGTTAGCA AATGGCACCC      360
GAGACAGAAC TATAGCAGAT GCAAGAGCCA AAAACCCACA GCCGCATTGA ATCTAGACC      420
TGCCTCGAG                                     429

```

(2) INFORMATION FOR SEQ ID NO:903:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

```

GAATTCGGCC TTCATGCCTT GTAACCATCA GGTAGATACA GCACCAACGG TAGTGGCTCT      60

```

TTATGACTAC ACAGCGAATC GATCAGATGA ACTAACCATC CATCGCGGAG ACATTATCCG	120
AGTGTTTTTC AAAGATAATG AAGACTGGTG GTATGGCAGC ATAGGAAAGG GACAGGAAGG	180
TTATTTTCCA GCTAATCATG TGGCTAGTGA AACACTGTAT CAAGAAGTGC CTCCTGAGAT	240
AAAGGAGCGA TCCCCTCCTT TAAGCCCTGA GGAAAAAACT AAAATAGAAA AATCTCCAGT	300
CCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:904:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

GAATTCGGCC TTCATGGCCT AGGACCTCGT AGGTCCCTAC AGCACCACAG TGCTCTTCAT	60
CTCTCAGAGG ACTGAACCAC CAGCCAGCAC CAACAGAGAC ACTGTGGAAA GCACAAGGAC	120
CCGACGGGCA CTGAGTGACG AGCAGTGTGC TGCCGTCATC CTTGTGCTGT TTGCTTTCTT	180
TTCCATTTTG ATTGCCTTTA TCATTAGTA CTTTGTAAATC AAGTGAAAT ATAACCTTAT	240
TTTTTAACTC TATTACATTT TATTTGTCA TGTACTAAAA TTATTCTGT ATTGCTTTNA	300
TAAAAACAG TGGCACCTCG AG	322

(2) INFORMATION FOR SEQ ID NO:905:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

GAATTCGGCC TTCATGGCCT AAAAAACAC ATAATTGAA TCAACACAAC CACCCACAGC	60
CTAATTATTA GCATCATCCC TCTACTATTT TTAAACCAA TCAACAACAA CCTATTTAGC	120
TGTTCCCAA CCTTTTCCTC CGACCCCTA ACAACCCCTC TCCTAATACT AACTACCTGA	180
CTCCTACCCC TCACAATCAT GGCAAGCCAA CGCCACTTAT CCAGTGAACC ACTATCACGA	240
AAAAAACTCT ACCTCTCTAT ACTAATCTCC CTACAAATCT CCTTAATTAT AACATTACAA	300
GCCACAGAAC AACTCGAG	318

(2) INFORMATION FOR SEQ ID NO:906:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

GAATTCGGCC TTCATGGCCT ACAGGAAACA TACAAAGCTG CTCATAGTGG GAGTCTTTT	60
GCTCATGTTT GTGTGCGGCC TCTTCTCAC TCGACCTTCA GGCAGTACT TCATCAGACT	120
GCTGAGTGAC TACTGGATAG TCTTCCCAT CATCGTCGTT GTCGTATTTG AAACCATGGC	180

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TGTATCCTGG GCCTATGGGG CCAGGAGGTT CCTTGCAGAC CTGACGATCC TGTGGGCCA    240
CCCCATCTCT CCCATCTTTG GTTGGCTGTG GCCCCATCTG TGTCCAGTTG TGCTGCTAAT    300
CATCTTTGTG ACCATGATGG TTCATCTTTG TATGAAGCCG ATCACCTACA TGTCTGGGA    360
CTCAAGCACC TCAAAAGAGG TGCTTCGACC ATACCCACCG TGGGCACTGC TCTTGATGAT    420
CACCCTTTTT GCCATTGTCA TCCTCCCCAT CCCTGCATAC TTTGTATACT GCCGCATACA    480
TAGGATTCCTT TTAGGCCCCA AGAGCGGAGA CGGGCCTATG ACAGCCTCCA CATCCCTACC    540
CCTAAGTCTC GAG                                                         553

```

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

```

GAATTCGGCG TTCATGGCCT AGTAGAGAAG ANNTATTGC NGTGACAATG AGGTTTCTAC    60
GTTCAAGTGGC AAGAGTTTTT GTTATTCTGA GTGTGGAAAT GGCTTCATCC AAAAAGAAAA    120
ACAACTTTAT TCCACAGCCA ATTGGAAAAT GCAAGCGTGT ATTCCAAGCA TTGCTACCTT    180
ACGCTGTGGA AGAATTGTGC AACGTAGCAG AGTCACTGAT TGTTCCTGTC AGAATGGGGA    240
TTGCTCGTCC AACTGCACCA TTTACCCCTGG CTAGTACTAG CATAGATGCC ATGCAGGGCA    300
GTGAAGAATT ATTTTCAGTG GAACCACTAC CACCACGACC ATCATCTGAT CAGTCTAGCA    360
GCTCCAGTCA GTCTCAGTCA TCCTACATCA TCAGGAATCC ACAGCAGAGG CGCATCAGCC    420
AGTCACAGCC CGTTCGGGGC AGAGATGAAG AACAGGATGA TATTGTTTCA GCAGATGTGG    480
AAGAGGTTGA GGTGGTGGAG GGTGTGGCTG GAGAAGAGGA TCATCATGAT GAACAGGAAG    540
AACACAGGAA GCTCGAG                                                         557

```

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

```

GAATTCGGCC TTCATGGCCT AAAAAAGTCA GCCAGGTGTG GTGATGTGCG CCTGTGGTCC    60
CAGGTATTCA CGAGCTGAGG TGGGAGGATC ACCTCAGCCC GGGAGGTGGA GGTTCAGTG    120
AGCCCATATC CCGCCACTGC ACTCCAACCT GGGAGACAGA GCGAGACCCT GTCTCCAAAA    180
AAAAAAAAAA AAAATCCGGG ATCTATTTAT GTAACACTA GAATCTTAAG TTCAGAATTT    240
ACTCCATAAG AGTATATAAA AAACCTACTG TGATTTTATC CATGTTTTTC CTAATATATA    300
ATAGGTCTAA GTCTTGTA CTCTGTCTCT GTCCACAGAG CCTTGAAAAT AATTAGAGC    360
TCAGTCATTC AGTTTGATT TATGTATAAA TTGAAATATA TTAATTACTT ATTTATAGTG    420
CAGCTCGAG                                                         429

```

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

```
GAATTCGGCC TTCATGGCCT AGTCCCTGAA AAAAAAAAAA GAAAAAAAAA ATTTAAATAG    60
AGGAAATACT AGCTAAGTTT AATGTAGGCC AGTTCTAAAA TAATGATTTA TTGCTGCTGT    120
TGTTACATAA TTTTCTTAAA TATTTTAAAG ATTGCACACT GTCTGCTCGT AGGCCATGAA    180
```

(2) INFORMATION FOR SEQ ID NO:910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

```
TACCTGCAGT TGTACCGGGT CACATGTGAC CAAACCTACC TGCTCCGATC CCTGGATTAC    60
GTAAAAAGAA CACTTCGGAA TCTGAATGGC CGCAGGGTCA CCTTCCTCTG TGGGGATGCT    120
GGCCCCCTGG CTGTTGGAGC TGTGATTTAT CACAAACTCA GAAGTGACTG TGAGTCCCAG    180
GAATGTGTCA CAAAGTGAGT TTTAGAACTG GAAACATTTT CTCCAATTC CCAGTGGAAG    240
CTCTTGCTGT AGAAAGATAT TCAGAAAGGA AACTATTTTT CCATTCATCC ATTGTTGTAA    300
ACAGATCACT CCAAATGTT AATCTTGAGC ATAGTGGTGG GATCATATGC CCTCTTTTAA    360
TCCAAGCATG TGTGTGCCGG TCTCGAG                                387
```

(2) INFORMATION FOR SEQ ID NO:911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

```
GAATTCGGCC TTCATGGCCT AGTGTCTTGA CAATGGTTGA GCTGGTTTGG ATCACAGGAA    60
CATTTATTTG ATAACGATGG AAGGAAAAAA CAGTGCTGTA ATAAGTCGCT TCTTAAATG    120
TGGGGTGTTA TTAAAAGAAT AATGGGAAAG TGCTACTGGG AAGGCAAACA CAGCAATTGT    180
ACTCTACAGA CAGGGATTCT CCTATTGGCC ATTTTAGAAA CATTCCCCAG GCAACATGAG    240
ATTATCCAAG TGGAGAGAAC CAGAGTCAGA GCCATTTTCT AGGCCGACAG AGCAGCGCTC    300
CAGATGAGAT ACTGAAGGTT TGAACCAAG TGATGGCAGT AAGATCAGAA AGCAAAAGGC    360
ATATCACAAA GAAACCATAA GATTCTCCAT CTGGATATAT AGAAGATAAA TGGAAGAGAG    420
AACTCGAG                                428
```

(2) INFORMATION FOR SEQ ID NO:912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGGCC	TTCATGGCCT	AGAAAACCAA	ATACTGCATG	TTCTCACTCA	TAGGTGGGAA	60
CTAAACAATG	AGAACACTTG	GACACAGGGC	TGGGAACACC	ACAACTTCTT	TTTCAGTTCA	120
TAACTCATAG	TCCACGATCC	ATGTGCTCTT	TGACTTGACT	TTTCTTAAAC	TCCTATTTTA	180
TGTGCTTCTG	ACTTGCTTTC	CCTTCTTATT	TGTAATCCAC	ACTAGCCTCA	AAAGATGCAT	240
GAACTGTGAA	TTTTCACTTC	CAGGGCCATG	GATAGTTGAA	CATCTAGTAG	TGAATTTCC	300
CTTTCAGAAG	ATAAATAAAT	TCATTCATTC	CCCTGGATCT	AGAAGGACAC	ACTCGAG	357

(2) INFORMATION FOR SEQ ID NO:913:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

CAGCCTGGGT	GGCAGAGCAA	GACTCCATTT	CAAAAAAAAA	AAAAAAAAAGC	CCAAGTCACT	60
TGCTGTTTCT	GGATCCAGTA	ACGCTGCCTC	AAATTTGATT	CAGTCACCTC	ACATACTTAA	120
CATTCTGGCT	TTCTTTTCCT	CTGTTTCTGG	CATCTGGAGA	TTTCCTTTTT	TTGTGTGTGA	180
GCTCATTTAT	GGTTATCTGT	TGTTATGTTT	AATACAACCA	TTCTGGCTG	AGGCTGCCAC	240
ATCTAGAGCT	GGTAAACTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:914:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGGCC	TTATGGCCTA	GTGATATGTC	ATAATCCCTT	CTGTGGGCTG	GGCCACATA	60
AGGAGAGTCA	AATCACTTGG	GTGCTGGGAA	GAGGCACATG	TCACACGTGC	AAGAAGGTCC	120
AAGGATGAGA	TTAAAAATTC	CACAAAGGTC	CAAATTCTAG	GGCCCAGACA	GAAGAGAAGA	180
GTCACATCAT	CTAGATGATG	AATGAAAAGA	TATGTCATTA	TTCTCCTTTG	GGCAGTGCTT	240
CTGCAGAAAA	GTTGCACCTT	CTAGGTGTTG	GACTCAGCAA	TATATCACAA	TGTCTGCAGT	300
ATTTTGGAAG	GAGAGGAGAG	TCACCATTAC	TAGGTGCTA	GGCCCAGCAA	TACATCTCAA	360
GCACTTCTTG	GGCAAAGCCC	AAGCAGTAAA	AAAGAGTCAC	ATTACCTAGG	TTCTGGGTAT	420
AGCAATATGT	CACAAATGCC	CCTAAGAAGA	GGGCCAGGA	AAAGACTCGA	G	471

(2) INFORMATION FOR SEQ ID NO:915:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

```

GAATTCGGCC TTCATGGCCT AGAGTGCCTG ACCTTCCTCTG TTCAAGAATT TATAAAGATT      60
CCTAACAGCA ATTCTAGAAA AAGGATAAAG ACCTCCACTT GGCTTTCAGA AGCCTCCAGC      120
ATCTGGCCCA AGCTAATACA GCCTTAAAAC TAATCTGGTT ATAGCCAGC CCCTCATTTT      180
ACAAAGAAAA CTGAGACCCC TGGCTATCTA TTAACCTGCT CCAACCAAAC ACATCATCTA      240
TCCCCTCTCT TCCTCCAGAT AACACTCACT TACCAGGCTA CAGTGAGGTC CACGTCTCTG      300
ATATGAGGCT CCTGTCCACA AGTTTGGTAA CCTTCATCTG CCTCATCACC AGTGAGCACC      360
CAGCACTTAG CACTGTGCCC GACACAGAAA TGAACACTCT GCTCCTCCGG GCCGGCGTGG      420
GTGCGCCGCT GCGGCCACCG GCAGCGCTCG AG                                     452

```

(2) INFORMATION FOR SEQ ID NO:916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

```

GAATTCGGCC TTCATGGCCT ACAAATGGTT GGTATTATGTT ATGATAGCAA TTTTCTGCAT      60
AGCATCAGCA ATGAGTCTGT ACAACTGTCT TGCTGCACTA ATTCATAAGA TACCATATGG      120
ACAAATGCACG ATTGCATGTC GTGGCAAAAA CATGGAAGTG AGACTTATTT TTCTCTCTGG      180
ACTGTGCATA GCAGTAGCTG TTGTTTGGGC TGTGTTTCGA AATGAAGACA GGTGGGCTTG      240
GATTTTACAG GATATCTTGG GGATTGCTTT CTGTCTGAAT TTAATTAATA CACTGAAGTT      300
GCCCAACTTC AAGTCATGTG TGATACTTCT AGGCCTTCTC CTCCTCTATG ATGTATTTT      360
TGTTTTCATA ACACCATTC A TCACAAAGAA TGGTGAGAGT ATCATGGTTG AACTCGCAGC      420
TGGACCTTTT GGAAATAATG AAAAGAATGA TGGAAATCTC GAG                                     463

```

(2) INFORMATION FOR SEQ ID NO:917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

```

GAATTCGGCC TTCATGGCCT AACGTACTTG AAAAGGCTTT CCTTTACTT TCCAGGACCA      60
AACAGCAACT TCCTGCCACA CACTTCCACC CTATCACTGG GAGAAATCCT TTTCTGGACA      120
TGAGCCTTTG ACCTGGGTGG GGCAGAAAGA ACCACAAACT CCATCTCCCA ATAGAACTTT      180
GAAATTCACT CAGCTTTTCC TTTCATGCTG TTTGTTGCCT GCTTGTTGCA CTCCTCTGTC      240
CCCAGAAGTG CAAGATTTT AGCTTCACCC CTTTCTGAGA GTAATGTTAT CTTTATCAG      300
AATCAGTATC AGTTCCCCTG TATTCTGTGC TTCATCGAAT TTGCAAGACT GACCTCTTTT      360
AAGCATTTAA TTCCTCCCA GAATCTCGAG                                     390

```

(2) INFORMATION FOR SEQ ID NO:918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

GAATTCGCCT	TCATGGCCTA	CAGTGACAAT	GAACAAAACC	AGCACACCAC	ACAAATGAGT	60
GATGAGGAAG	AGGATGATGA	TGGCTGTGAC	CTTTTGTCTG	ACTCTGAGAA	GGAGGAGGAA	120
GATATTGAGG	ACATTGAAGA	AAATACTAGA	CCTAAAAGAA	GCAGACCTAC	ATCGTTTGCA	180
GATGAGCTGG	CTGCCCGCAT	CAAGGGGGAT	GCCATGGGTC	GAGTGGACGA	GGAGCCGACA	240
ACCTTACCCT	CAGGAGAAGC	AAAACCTCGG	AAGACACTCA	AAGAGAAGAA	GGAAAGGAGA	300
ACTCCTTCAG	ACGAGTCTTC	ATCATCCAAA	CCTGGAAAGA	AAATCCCAGC	AGCTCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:919:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCGGCC	AAAGAGGCCT	AGTGCTATTG	AAACATTGGT	AACAGCAATT	TCTTTAATTA	60
AACAATCCAA	AGTCTCTGCA	GATGATCGTT	GCAAAGTTCT	TATTAGCTCT	CTGCAGGATT	120
GCCTTCATGG	AATCGAGTCC	AAGTCCTATG	GGTCTGGATC	CAGACGTGAA	CGATCAAGAG	180
AACGGGACCA	TAGTAGATCA	CGGGAAAAGA	GTCGTCGCCA	TAAATCTCGG	AGTAGAGATC	240
GCCACGATGA	CTATTACAGA	GAGAGAAGCA	GAGGTCGAG			279

(2) INFORMATION FOR SEQ ID NO:920:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCGGCC	TTCATGGCCT	ACAGAACTTG	AAGCCATCAA	TAAAAGAGTA	AAAGACACTA	60
TGGCACGATC	AGAAGATTG	GACAATTCCA	TTGATAAAAC	AGAAGCTGGA	ATTAAGGAGC	120
TTCAGAAGAG	TATGGAGCGC	TGGAAAAATA	TGGAAAAAGA	ACATATGGAT	GCTATAAATC	180
ATGATACTAA	AGAACTGGAA	AAGATGACAA	ATCGGCAAGG	CATGCTATTG	AAGAAGAAAG	240
AAGAGTGTAT	GAAGAAAATT	CGAGAACTTG	GATCACTTCC	CCAGGAAGCA	TTTGAAAAGT	300
ACCAGACACT	GAGCCTCAAA	CAGTTGTTTC	GAAAACTTGA	GCAGTGCAAC	ACAGAATTAA	360
AGAAGTACAG	CCATGTTAAC	AAAAAGGCTT	TGGATCAGTT	TGTAAATTTC	TCCGAGCAGA	420
AAGAAAAGTT	AATAAAGCGT	CAAGAAGAGT	TAGATAGGGG	CCCACTCGAG		470

(2) INFORMATION FOR SEQ ID NO:921:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GAATTCGGCC	TTCATGGCCT	AGCAGTGGCG	TGGAAGGAG	ACGCGGAGGG	GCAGTGGCGT	60
TGGAAGGAGA	AACGGAGGGG	CAGTGGCGTT	GGAACGGGGG	CAGTGGCGTC	GGAAGGGGAC	120
GCGGAGGGGC	AGTGGCGTTG	GAAGGAGAGA	CCAGGGCCGC	GGGGCTGCTT	CTTGTAAGG	180
GCCAAGCTGT	GAGGACTTCG	GGCTTTGCGG	CCGCTTTTGT	CTATGTCCCA	TCTCCTTCTT	240
TGTTTTGTTT	TTCTCAAACC	CTTTAAAAAC	GTGAAAACCA	TTTCTAGCTT	GGGGGCCCTA	300
TAAAAATAGG	CCTCGCTGGC	CCTAGTTTGA	TGACCCCTGA	AACAGACAAT	TCAAGGAGAA	360
GCTTAGTGAA	AGAGTCACTT	ATAGCTTCAT	AAAAATAAGA	GAAGATATAG	TATCCATAAA	420
ATAATAATAA	GATTGTATCC	ATGAGGTTC	TCGAG			455

(2) INFORMATION FOR SEQ ID NO:922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GACATGACCC	TGGACAAAGA	ACAAATAGCG	AAGGATTGTC	TTTCAGGGGA	AGAAGAGGAA	60
GAGACGCAAT	CATCTGCTGA	CGACCTCACC	CCGTCCGTGA	CCTCCCACGA	GGCCTCCGAC	120
CTCTTCCCTA	ACCGGAGTGG	ATCTCGTTTC	CTGGCTGATG	AAGACAGAGA	GCCTGGGCTCT	180
TCTGCCTCT	CCGACACCGA	GGAGGACTCT	CTTCTGCCA	ACAAATGTAA	GAAGGAGATC	240
ATGGTGGGAC	CTCAGTTCCA	AGCTGACCTC	AGCAACCTGC	ACTTGAACCG	GCACTGTGAG	300
AAGATCTACG	AGAACGAAGA	CAAGCTACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

GAATTCGGCC	TTCATGGCCT	AAGCAGCCTT	TCACCAGGGC	TCCATCTGTG	AAGAGTCTCA	60
GCCATGACTT	TGAGCTGAGC	TTGGGAGAAG	TAAAGCAACT	GTTAAGGCCA	GCCCTTGCCC	120
CTCAGACCTG	CCATGAAAGG	AATGAGCCCT	AGACTGACTC	CTGCAGCACC	CCCCGGACAG	180
GCTGGGACCA	GCTGTTTGTC	TCCAGGTGTC	AGAGTCCCTC	CTCCTCCTCC	AACCTCTCCA	240
TTGAATTCTA	GACCTGCCTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

ATTTTGGGGA	CCAAGAACCT	GTACAAGGAT	TTGTGATGAA	CTTTTCCAAT	GGGGAAATTA	60
TCGACATCTT	CAAGCCAGTG	CGCAAGCACT	TTGATATGCC	TCATGATATT	GTTGCATCTG	120
AAGATGGGAC	TGTGTACATT	GGAGATGCTC	ATACCAACAC	CGTGTGGAAG	TTCACCTTGA	180
CTGAGAAATT	GGAACATCGA	TCAGTTAAAA	AGGCTGGCAT	TGAGGTCCAG	GAAATCAAAG	240
AAGCCGAGGC	AGTTGTTGAA	ACCAAAATGG	AGAACAAACC	CACCTCCTCA	GAATTGCAGA	300
AGATGCAAGA	GAAACAGAAA	CTGATCAAAG	AGCCAGGCTC	GGGAGTGCCT	GTTGTTCTCA	360
TTACAACCCT	TCTGGTTATT	CCGGTGGTTG	TCCTGCTGGC	CATTGCCATA	TTTATTCGGT	420
GGAAAAATC	AAGGCCTTT	GGAGCAGATT	CTGAACACAA	ACTCGAG		467

(2) INFORMATION FOR SEQ ID NO:925:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

GCCATCCTCT	GACAAAAGAA	AGAATATGTA	CTCAGGTGGA	GAGAATGTTT	AGATGAATGG	60
GGATACGCCC	CATGATGGAG	GTCACGGAGG	AGGAGGACAT	GGGGATTGTG	AAGAATTGCA	120
GCGAACTGGA	CGGTTCTGTG	GTGGACTAAT	TAAAGACATA	AAGAGGAAAG	CGCCATTTTT	180
TGCCAGTGAT	TTTTATGATG	CTTTAAATAT	TCAAGCTCTT	TCGGCAATTC	TCTTCATTTA	240
TCTGGCAACT	GTAACATAAT	CTATCACTTT	TGGAGGACTG	CTTGGGGATG	CCACTGACAA	300
CATGCTCGAG						310

(2) INFORMATION FOR SEQ ID NO:926:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 287 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

GAATTCGGCC	TTTCATGGCCT	AGTGGAGACC	TGGCCAAGGT	ACAGAGAGCT	GTGTGCATGC	60
TGAGCAACAC	CACAGCCATT	GCTGAGGCCT	GGGCTCGCCT	GGACCACAAG	TTTGACCTGA	120
TGTATGCCAA	ACGTGCCTTT	GTTCACTGGT	ACGTTGGGGA	GGGGATGGAG	GAAGGTGAGT	180
TTTCAGAGGC	CCGTGAGGAC	ATGGCTGCCC	TTGAGAAGGA	TTATGAGGAG	GTTGGTGTGG	240
ATTCTGTTGA	AGGAGAGGGT	GAGGAAGAAG	GAGAGGAAAA	CCTCGAG		287

(2) INFORMATION FOR SEQ ID NO:927:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 332 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

CCGCGCACCA	ACAACAGCAA	CAACTCCACT	GCGCCGGGCT	GAGGAGCAGG	AATTAGGAGC	60
------------	------------	------------	------------	------------	------------	----

TCGCGAATAA	TATGAAAGGG	ATCCGCAAAG	GGGAAAGCCG	AGCAAAGGAA	TCCAAACCCT	120
GGGAGCCTGG	CAAGCGAAGA	TGCGCTAAAT	GTGGCCGCCT	AGACTTCATC	CTGATGAAGA	180
AAATGGGGAT	TAAAAGTGA	TTTACGTTTT	GGAACCTCGT	CTTTTATTG	ACGGTGTCTT	240
GTGTGAAAGG	TAGTCTGCT	TTGGGGGTCC	CCTCCGCTTT	GGATGGAGGT	GGGCTGACTT	300
GTAGATGGAG	AGAGGCTGGC	AGCTTACTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:928:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

AGCCTGCCAT	CCCAGGCTTC	AGATTGGAGC	CGATACTCAA	GCAGCTTACT	GGAATCCGTC	60
TCTGTTCCCTG	GAACACTAAA	TGAGGCTGTT	GTAATGACTC	CATTTTCATC	GGAACCTCAA	120
GGAATTTTCAG	AACAGACCCT	CCTGGAGCTG	TCCAAAGGAA	AGCCCTCCCC	GCATCCCAGA	180
GCCTGGTTTG	TGTCTCTTGA	TGAAAGCCA	GTTGCACAAG	TGAGGCACTC	CTTTATAGAC	240
CTGAAAAGG	GCAAGAGAAC	CCAGAGCAAT	GACACCAGTC	TGGACTCTGG	GGTGGACATG	300
AATGAGCTTC	ACTCAAGTAG	AAAGCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:929:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

GAATTCGGCC	TTCATGCGCT	AGTGAGTGGG	TGATATCTGT	AAAGTGCATT	GTCTTCAGTT	60
GTAGGTGGGG	TAGGTGTAAG	GGAATGGCGG	GGGGGCATGC	AATATGGGTG	AGGGAGGGCA	120
GTGCCCTTCT	CATCCAGAC	CTGAGCCCCC	CCCAAACCT	GTCTGGACTT	TGATCAGGAT	180
AAGAACGTTG	CAGGGCGAGG	CAAGTTCCTG	AAGCCGAAGA	GGTCTGGGCT	GGGGCCTACT	240
GGAGAAAGGG	CATAGACTGG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:930:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

GCGAAAATAA	CCTTTTCTAA	TGAGGATGTC	TGATACTGTT	ACTGTAAAAG	ATGAAACTGC	60
AACAATGAAG	GATTTCGAGG	CAGAAGTGAA	AGATACAACC	AGAGTTGAAA	ATCTTATCAA	120
ATCAGAAAAC	TATGGGAAGA	TTTTGGTAGA	GAAGAATGAA	CATTGTATTG	AGAACAATAT	180
AGATTTCAG	GAGAAAATTC	AGATCCAGTT	AACACAATCA	TTTGAGAAAG	AAGAGAAGCC	240

CTCAAAAGAT GAAGCAGAAA AAGAAAAGGC CAGTGATAAG TTGCCCAGAA AAATGTTATC 300
AAGAGATCCC AGTCTCGAG 319

(2) INFORMATION FOR SEQ ID NO:931:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

GAATTCGGCC TTCATGGCCT AAAGAAGAGC AGGAAGTCCA ATGTGGCCGA AGCAGAGTGA 60
GCAAGGGCAG GAGTACCAGA GGAGGAGATA GGACGCCAAA GAGTTAAGAA AAGGAGGAAT 120
GCAGAACCTT TCCATCAAAA ATAAATAAT ACATAACCAT GGTATGTGG GGTGGGGTTG 180
TCTCTTCTT TTGGAAGAA GAAGGCTTT CTGGAATAG ATGGCCAGGC CAGGCAGCAA 240
GCTGCTAAAC TCGAG 255

(2) INFORMATION FOR SEQ ID NO:932:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 588 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

GAATTCGGCC TTCATGGCCT AGCATTTTCA AAAATTCAGT GCAAGCGCCA GGCGATTTGT 60
GTCTAAGGAT ACGATTTTGA ACCATATGGG CAGTGTACAA AATATGAAAC AACTGTTTCC 120
ACACTTGCAC CTGATCAAGG AGCAGTGCTT CTCCATTTGT TTTGCAGAGA AATGTTTTTC 180
ATTTCCCGTG TGTTTCCATT TCCTTCTGAA ATTCTGATTT TATCCATTTT TTAAAGGCTC 240
CTCTTTATCT CCTTTCTTAA GGCAGTGTG CTATGGCACT TTTCTATAAC CTTTTCATTC 300
CTGTGTACAG TAGCTTAAAA TTGCAGTGAT TGAGCATAAC CTA CTGTTT GTATAAATTA 360
TTGAAATCCA TTTGCACCCT GTAAGAATGG ACTTAAAAGT ACTGCTGGAC AGGCATGTGT 420
GCTCAAAGTA CATTGATTGC TCAAATATAA GGAAATGGCC CAATGAACGT GGTTGTGGGA 480
GGGGAAAGAG GAAACAGAGC TAGTCAGATG TGAATTGTAT CTGTTGTAAT AAACATGTTA 540
AAACAAACAA AAATTGTTAT TTTCTTTTC CTTGGTCAG AGCTCGAG 588

(2) INFORMATION FOR SEQ ID NO:933:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 520 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

GAATTCGGCC TTCATGGCCT AGGGGAAGGA AAGGCCCGTG TGGAGGAGCA TGGAGCCATC 60
TGCTCATGAA GGAAAGGCAG GGATGGGGCA GAGGTGTTGG GGCTCCCGTG CGACTCCAGA 120
GGCCAAGCCC AGAGCTGTGT GTGGAGCCCA TGAGGAGCAG AGATTTTCCA GCAAAGGTGC 180

ATTGTG	GGGC	CTCCAGATGG	AGGCCCTACC	TTCTCAGCAA	GGGAAGAAAC	CCCTCTCTCT	240
TTGACCTCTC	TCCCCTGCAC	AATTAGAAGG	TTCTGAAGAG	TGACTTCATT	ATTGGTGGGT		300
GAGTATATGT	TTATTGGGCA	TCTGTGGTGT	GCCAGATGTT	GTGTTGAGTG	CTGGGTGCAG		360
AGGTAAATGG	GATATCTGGT	TACCGCCAC	ATGGGGCTTA	TAGTGGGGGA	AGTGGGGGAG		420
TAAGTCAGGA	CACACGTAAG	CAAACGCTAG	AATGGATAGA	TATTGTGATT	AGAGCATTGG		480
AGAGAAAGAA	CAGGATGTTT	CAAGAAAGGA	CAGTCTCGAG				520

(2) INFORMATION FOR SEQ ID NO:934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC	TTCATGGCCT	ACTTTTTTTC	TCAAGGTGCA	ATGAAAGCCT	TCCACACTTT	60
CTGTGTTGTC	CTTCTGGTGT	TTGGGAGTGT	CTCTGAAGCC	AAGTTTGATG	ATTTTGAGGA	120
TGAGGAGGAC	ATAGTAGAGT	ATGATGATAA	TGACTTCGCT	GAATTTGAGG	ATGTCATGGA	180
AGACTCTGTT	ACTGAATCTC	CTCAACGGGT	CATAATCACT	GAAGATGATG	AAGATGAGAC	240
CACTGGGGAG	TTTCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:935:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

AACAAAATGA	AACAAACAAA	AGACAGAGGC	CAAGAAAGGC	TAAGTAACTT	GCCTAAGACT	60
ATATAATAAG	TCACAGGGCA	GGGAATAAAA	CTCAGTTTTT	CTGACTTCCA	TTAAGGTTGT	120
CTTTTCCTCA	CTCCACATTG	CCTGTCATT	TTTTTCTGAT	TATCTTAAG	AAGGAGTGAG	180
GAGAGAGAAT	AGAGAAACAG	ATTTTTTCT	CGGACTATCT	TTTCTGTAGG	GAAAAACCAC	240
TGAAGCCCTA	TTAGCCTGGA	AGCTGCTTAT	AGGGTTACAA	TACTGTGTGT	CCTGCAGAAC	300
CTGTGAAGCT	CTTCTGTATT	TTCTGGACTT	TCCTGGAAAG	TCATTAGAT	ATAATGTAAT	360
AAATATAATA	AAGTAGTTTA	GATATAATGA	GGTTTTCAAT	AGGCTTCCTC	GAG	413

(2) INFORMATION FOR SEQ ID NO:936:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC	TTCATGGCCT	ACCCTGAGAG	TAAGCCAAAA	AAGGAAGAAA	AAAATATGGA	60
AGTAAATATG	AAAGAGTGGA	TTTTACGATA	TGCTGAACAA	CAAAATGAAG	AAGAAAAGAA	120

TGAGAATTCT AAAAGTTTAG AAGAGGAGGA AAAATTGAC CCTAATGAAA GGTACTTACA	180
TCTTGCAAGCA AAACGTCTGG ATGCAAAAGA ACAAGCAGCT ACCTTTAAAC TAGAAAAAAA	240
CAAGCAGGGC CGTCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:937:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 263 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GCGAAACCGT GGTCAGCTGC AAGAAGGCAC AGGAGAACAT GAAGCAAAGG CACGAGAACG	60
AAACGCACAC CTTAGAAAAA CAAATAAGTG ACCTTAAAAA TGAAATTGCT GAACTTCAGG	120
GGCAAGCAGC AGTGCTCAAG GAGGCACATC ATGAGGCCAC TTGCAGGCAT GAGGAGGAGA	180
AAAAACAAC TCAAGTGAAG CTTGAGGAGG AAAAGACTCA CCTGCAGGAG AAGCTGAGGC	240
TGCAACATAA GAGGGAGCTC GAG	263

(2) INFORMATION FOR SEQ ID NO:938:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 384 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

GAATTCGGCT TCATGGCCTA TTCCACTACT AGGCTGACAT GCAAAATCCT AAGAGAAGTC	60
AGTCTTCCAG GATTGATCCT GGCAATTGTG CTTGCTGTTC CCCGTGCCCTG GAGCACCTGT	120
CCCAGCTCCC CTGTGGCTGG CTCCTTCTCA CCATCCAGGG TTCAGTCCAA ATATCTCCTT	180
CAAAGAGAGA TCTTCCAGGG TCACCTAATC CAGAGAGTGC CCTCTATGGT TGCCACATCC	240
CCCCGACCCA CCACCCACCA CCCCCACTT CAACTCCTTT ATGGCACCTG CCCCTCCCTG	300
AAATTCTCAC TGTGCTTAT TTGTATCTA GCCCTCTCAT CAGAAATGTAG ATCCACTGGT	360
GACAGGGGAC TTGTGTGCCT CGAG	384

(2) INFORMATION FOR SEQ ID NO:939:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGCC TCCATGGCCT AGTTGTGTTT TTTGGGCTTG CTATTAATGC AAACCTGAT	60
TGCAAAATGGA TGTGATGTTT CATACCTTTT TTATCAGGAA AAAAGCAGCA AGCCTTCAGG	120
TGTTCCAGTG ATGCCGTGACA CAATTGAGCT GGACTTTATG CTGCTCTTTA CAGTAAGAGG	180
TGTTGCATTG TATGTGGGGA CTATGTGCAC TGGCGTCTAA GACAGTGACC TCAACAATAT	240
TAGCTTTGCA CAAACCCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:940:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

```

GAATTCGGCC TTCATGGCCT AGTGGAGGAC TGCTTTTGTG AACATGAGAA AGCAGCGCCT      60
GGTCCCTATG TATTGGGTC TTATTACAT CCTTCTTTAA GCCCAGTGGC TCCTCAGCAT      120
ACTCTTAAAC TAATCACTTA TGTAAAAAG AACCAAAAGA CTTTCTCCA TGGTGGGGTG      180
ACAGGTCCTA GAAGGACAAT GTGCATATTA CGACAAACAC AAAGAACTA TACCATAACC      240
CAAGGCTGAA AATAATGTAG AAAACTTTAT TTTGTTTCC AGTACAGAGC AGAACTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

```

GAATTCGGCC TTCATGGCCT AGTATATCTG AAAAGTACAC TGTGTTTGA AATTATAAAT      60
TTTCATTCTG AATGAGGTTT CTTTTTTTGA TTTCTTTAA AAAAAAAAAA CAACCTGCCT      120
TGATTTGCTT TACATTCTT GCCCTCCATT TTTCTTATTA TATTGTAAAC ATTAGAAAAA      180
TGAACACCCT CGAG                                     194

```

(2) INFORMATION FOR SEQ ID NO:942:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 581 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

```

GAATTCGGCC TTCATGGCCT AGTGAGGATA AAGATAAGGA ACAGGCCAGG CACAGTAGCT      60
CACGCCTGTA ATCCCAGCAC TCTGAGAGGC CGAGGCAGGT GGATCACATG GGGCCAGGAG      120
TTTGAGACCA GCCTGGACAA CATGGTGAAA CCCCCTCTCT ACTAAAAATA GCCAGGTGTG      180
GTGGCACACA CCTGTAATCC TAGCTACTTG GGAGGCAAGG TGGGAAGTTT GTTTGAACCA      240
GGAGGCAGCG GTTGCACTGA GTCAGATCA TGCCACTGCA CTCCAGCCTG GGTGACAGAG      300
TACGACTCTG TCCCCAAAAA AAAAAAAG ATAAGGAACA GACCCAACCC GAATCCACAC      360
AACCTGACAC ACAGGAAAGT CTTGCCCATC CATCCACCTA CCTCCCAAC CAGAGTAGTG      420
AAGCTATAAC CCCAGAGAGA TACCTTTGAT GTGAGCACTG TCCAGCATGG GCACCAAGGC      480
ATTCACTGTC TCCAGGAGTG CAACCTGGGA AAGGATAAAC TGCTCCTCTA AAGCAAAAT      540
GGACAAGATA GTTGCACTGA AGCAAACCTG GGCATTGCTA G                                     581

```

(2) INFORMATION FOR SEQ ID NO:943:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 259 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

GAATTCGGCC TTCATGGCCT AAAACAGGCA ACAATGACCT TTTATTTTCT GTTTGTCCCC	60
ACCTCCCCAG CCTTCCACCT CCTGTCTTC CTACCTTCTT CCTTTTGTAC TAAATAATCC	120
CCACCTCCCT TGATCATACA GTGAGGCTAC AGTGACTGAG GGGAGAATCC CCTCCTGTTC	180
ACTCTCCCAA CCCTGCTCCA GCCCCTCAGC TTCCCAGACC CTCATGCAGT TGGTTGTAAA	240
TTCTCCAGT GAGCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:944:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 360 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

GAATTCGGCC TTCATGGCCT AAAACCTCAC GTGGCCTCTG ATTTTATTGT GGGTGCATCC	60
ACAGGTGGCC CGAGCTGTTT TTTAGCTGC TCCAAGGATT GAGACCCAAG TCATCATGAA	120
AAAGGCCCAA GTACAGTCTT AATGCGATAA ATCCACTAGC TAAGACGTCG AGTGCCAAGA	180
CCAGCCTTCC AGCCGAGGTT TGGACAAAGT CTCAGGTTCC CGTGACTCAG GGTAAGGTGC	240
TGGGGCTGCC AGAGGACCTG CCCCAGCAAG ATTTTGTCA AGAGCGAGAC TCCATCAGCC	300
CAGGCAGACG GGAGCAGGTT CTTGGCCAGC GTAGACAGCA GCAAACAGCA GCTCCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:945:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 206 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

GAATTCGGCC TTCATGGCCT AGTGCAGGAG ACGCCCTCAC CGGAGATGGG GACCGAGTCC	60
ACACGGCTCT CACTGCAAAT GCTTTGGGAA AAACAAGACA GTGTACTTTG TGATCATATA	120
AAACAGCAAA ATAAAATAGT CGTGGGCACA GGGCCAGTGA TTCTGCAGTT AGAGCCGTGT	180
GGACTCGGTC CCCTCTCCGG CTCGAG	206

(2) INFORMATION FOR SEQ ID NO:946:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 272 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

```
GAATTCGGCC TTCATGGCCT AGGTTCCCCG GCGTGGCATG GATGATGACA GAGGCCCTAG    60
ACGTGGTCTCT GAGGAAGATA GGTTCCTCTG TCGTGGGGCA GACGATGACC GGCCTTCCTG    120
GCGTAACACA GATGATGACA GGCCTCCCAG ACGAATTGCC GATGAAGACA GGGGAAACTG    180
GCGTCATGCG GATGATGACA GACCACCTAG ACGAGGACTG GATGAGGACA GAGGAAGCTG    240
GCGAACAGCT GATGAGGACA AAGGACCTCG AG                                     272
```

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

```
GTTTTGCTTA GATTTTGCTT TGGTTAGGTT GCGTTTTGGG GTTGCCTTT TTTGTTGTC    60
GCTTAAATGC AATTGGTTG TAAAGATTG ATTCTTTGT GTTCATCTGT TCCGCTTCTC    120
AGCGGTCCAT CTCAGCGTCT CCCTTCAGGA ACCGCTGAGT GTCCTCTCTT AACATCCAAG    180
CCTTTTAATG AAATCGTACT GAAATCTGTA TCAGCTAAGA GTCCTCCAAT CCTGGTCCCA    240
TTAACTCCAA GTGCCTTTT GACAGTGACA ACAGACAGTC CCTCGGCACT CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

```
GAATTAGAAT CTCTAAAGAA ACAGGAGGGA CTTCTTAAAA ATATTCAGGT CTCACATCAG    60
GAATTTTCAA AAATGAAACA ATCTAATAAT GAAGCTAACT TAAGAGAAGA AGTTTGAAG    120
AATTTAGCTA CTGCATATGA CAACTTTGTT GAACTTGTA CTAAATTGAA GGAAGGCACA    180
AAGTTTTACA ATGAGTTGAC TGAAATCCTG GTCAGGTTCC AGAACAATG CAGTGATATA    240
GTTTTTGAC GGAAGACAGA AAGAGATGAA CTCTTAAAG ACTTGCAACA AAGCATTGCC    300
AGAGAACCTA GTGCTCCTC AATTCCTACA CCTGCGTATC AGTCCTCACC AGCAGGAGGA    360
CATGCACCAA CTCCTCCAAC TCCAGCGCCA AGAACCATGC CGCCTACTAA GCCCCAGCCC    420
CCAGCCAGGC CTCCACCACC TGTGCTTCCA GCGTATCTCG AG                                     462
```

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 624 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

GAATTCGGCC	TTCATGGCCT	ACTCAAAGAG	ACAACAAATA	GCATGGTAGA	ATCAATTAAA	60
CACTGCATTG	TGTTGCTGCA	GATTGCCAAA	AGTACTATTA	ATCCCGTAGA	TGCAATATAT	120
CAACCTAGTC	CTTTGGAACC	TGTGATCAGC	ACAATGCCTT	CCCAGACTGT	GTTACCTCCA	180
GAACCTGTTC	AGTTGTGTAA	GTCAGAGCAG	CGTCCATCTT	CCCTACCAGT	TGGACCTGTG	240
TTGGCTACCT	TGGGACATCA	TCAGACTCCT	ACACCAAATA	GTACAGGCAG	TGGCCATTCA	300
CCACCGAGTA	GCAGTCTCAC	TTCTCCAAGC	CACGTGAACT	TGTCTCCAAA	TACAGTCCCA	360
GAGTTCTCTT	ACTCCAGCAG	TGAAGATGAA	TTTATGATG	CTGATGAATT	CCATCAAAGT	420
GGCTCATCCC	CAAAGCGCTT	AATAGATTCT	TCTGGATCTG	CCTCAGTCCT	GACACACAGC	480
AGTCGGGAA	ATAGTCTAAA	ACGCCAGAT	ACCACAGAAT	CACTTAATTC	TTCTTGTCC	540
AATGGAACAA	GTGATGCTGA	CCTGTTTGAT	TCACATGATG	ACAGAGATGA	TGATGCGGAG	600
GCAGGGTCTG	TGGTGAAGCT	CGAG				624

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

GATTCTAGAC	CTGCCTCGAG	CACGCTTGA	GAAGCCCGT	CTCTACTAAA	AATACAAAAT	60
TGGCCGGGCA	TGGTGGCGCA	TGCCTGTGGT	CCCGGCTACT	CTGGAGGCTG	AGGCGGGAGA	120
ATCACTTGAG	CCCAGGAGGT	GGAGTTGAGG	TGAGCCGAGA	TCGTGCCATT	GCACTCCGGC	180
CTGGGTGACA	GAGTGCAACT	CCGTCTCAAA	AAAAAAAAAA	AAGCATTCAC	GTCAATGTCA	240
AGAGAACCTG	CTACTAATGC	TTTCTTTGAT	AGGCAGTATG	ATAGGTTGGA	AAGAATATAA	300
ACTGGGATCA	AGCTTGGGTT	CCACTTACCA	GCTGTAGTAT	GTGAGCAAAA	TTATTTAATC	360
TAACACTCGA	G					371

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

GCGATTGAAT	TCTAGGGTTT	TTTTTTTTTT	GGGATCCTGG	GTAAAATTTT	ATCCAAAAAA	60
CGGGATTTT	TTTTTTTAA	AAAAGGAAAT	TTGAATTCAA	AATTTGGGC	AGCCCCGGCT	120
TTTTTTTTTT	TTTTTTTTTT	TTTTTTTTTT	TTTTTTTTTT	TTGGTGGGTT	CTGAGTCTTC	180
ACTTTATTAC	TATGTCACCA	GAAGTCACCA	CCTTCACTTG	GTTCACCACA	GATGGATGGA	240
TGTCATAAAG	GAGGGTGCCA	CGGGGCCACT	GGATTCCTC	GAG		283

(2) INFORMATION FOR SEQ ID NO:952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

```
GCTTGGCAGA TGCTAACTTC ATGGAAGATG GTAATAGGAA CAGATACTGC TCTCTGCCCC    60
TGCTTCTTGG ATTCTTCAGC TCCTACCGCT GATTCGGATT ATCCCCTTTT GACCCTCTTG    120
GGGATCCAGA CTGCTGCCAG GAGGCTGAGT AGATACCTCA GTTATCTGTA TGTTATTCTT    180
GAGAGGCTTT GCGGATCCT CTTCACTTGG CATCCTGTGG CATCCCTAGG GTCTGGTGGT    240
AGCAGTAATA GCAACAATGA TATCTTACAT CTGGAACAAC TCGAG                      285
```

(2) INFORMATION FOR SEQ ID NO:953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

```
GAATTCGGCC TTCATGGCCT AATTCTAGAC CTGCCTGTCT TGAGAGGAAC CTTCCCTGTG    60
CTGGCTCCTG TTGTATCTG TACCTAAGTT ACTCAGTTCT GAGTGCAATG CTGGTAAATG    120
CTGGCCATTT CTTGAAGTT CTGACTCAGA ATCGGCCTCC ATTAGAGAAC TCAGTTCTCC    180
AAACCCAGTC ATGATCTGCC TTTAAATGA CCGAAGAGCC ACTGATGATG GCTCAACAAG    240
CTCATTCTCA GAAATCCTAC GAAGAGGAAC TGTATGGTA CTAACATAGG TTCGAATACC    300
TGACCGCTCT AAACGAGAAA TGGTTCGGCG AAAGCCCCCA CTATTGCTTT CAATAGTGAC    360
TGTATTTTCT GCTAGCCCTA CTCTGGATCG AGTTCTATT GCAATACTAT CCCGATCTCT    420
ATTTTCTCCA GGACGGATCC TTCTCACTG AAGGTCCAGT GTGATTGTTG GATGTCGTCG    480
TACAGCAGTT GAGGATCTGC TGGATTCTTC TCCTTCTTCT ACTGTTATTC TTGACACAAG    540
CCTTGAATTA GAGAATGGGG TATATGCAGT ACCTCTGCGT TCTCGTTCTC TATCTTGCTC    600
TAAAAAGACT CGAG                      614
```

(2) INFORMATION FOR SEQ ID NO:954:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

```
GAATTCGGCC TTCATGGCCT ACAAGGATTT CAGGATGTTT TTCCTCTGGA CTGCTCTGTT    60
CTGGGGTGGA GTCATGTTTT ACTTGCTGCT CAAGAGATCC GGGAGAGAAA TCACTTGGA    120
GGACTTTGTC AATAACTATC TTTCAAAAGG AGTAGTAGAC AGATTGGAAG TCGTCAACAA    180
GCGTTTTGTT CGAGTGACCT TTACACCAGG AAAAATCCT GTTGATGGGC AATACGTTTG    240
GTTTAATATT GGCAGTGTGG ACACCTTTGA ACGGAATCTG GAAACTTTAC AGCAGGCGCT    300
CGAG                      304
```

(2) INFORMATION FOR SEQ ID NO:955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

```
GAATTCGGCC TTCATGGCCT AGTAGCTATT AATCTGTGGC TATGAAATGA TCAGAAATGC      60
TAAGTGAGAT CAATATTTGT TTGGAAGAAA AATCTTGGA AACAAACCAA GGGTTTTTCG      120
TGTGTTGTTT TTCTTTTTC TATTTTGTN NACTTAGTCC TTAGCTAGT GGATTTAATT      180
TTGTTGTGCC TGCTTCATT TGCAATAACA ATGCAGTAGA ATTTAAACT TGGACGCTCG      240
AG                                                                    242
```

(2) INFORMATION FOR SEQ ID NO:956:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 293 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

```
GCTGCGCTGT ACTTCAGATA CTTTTTCGA GGAACATTG TGATTGTGG CATAAGTAA      60
CTGTCTAAG GAAATCTTCT GAGAGGATCT GGTCAATTTA TGAAAGGGG AATTAAGGG      120
AAATGGAAGC AGATCTTTTA AAGAAGGAGC ATTTGAAATT AGCCCAGGAA TCATGTCCGG      180
CGAGTCCTGC TCTTTGTAC CTGGGCATAA TAGTCAGCCA CACAGAGCTA GAGTTAGTTC      240
AAGAATTGTC TTCCTGATC GTGCTATATT TTTGGAACA CGCCGTACTC GAG              293
```

(2) INFORMATION FOR SEQ ID NO:957:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 253 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

```
GCAAAGAATG GTAACGTGCT TATCATGGGA GTGTTTGTAG AAAGCTTCAG      60
CAGAAAAATC CCCGAGAAAG ACCAGAGAGT TCTCACCAC AACAATGTTC CTGCTCATCC      120
CTCTCATCAA ACAAGGCCAT TTTGCAAGAG TTTTGATGGG AAATCACTAG GCATCCACCC      180
TACAGTCCTG GTTTGGCACC TTCTGACTTT TTGTTCCCTA ATCTTAAAAA AATTTTTCAG      240
GGCAACTCTC GAG                                                                    253
```

(2) INFORMATION FOR SEQ ID NO:958:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 466 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

```

GAATTCGGCC TTCATGGCCT ACAACATCAG CTCCTGTCTG GTTCTCCAGC TGCACGACCT      60
CAAACACAA CCTCAGCTCT TCCCCGAGTC TTCTGCTGCA TGACCCTCAA TCTAGAACAT      120
AAGCTCCTCT CTGGGTGTCC ACCTGTAGGG ACCTCAAATT AGAACGTCAG CTCCTCCCAG      180
AGTCTTCAGC TGCATGACCC TCAATCTTTA ACATCAGCTC CTCTCCAGGT CTGCAGCTCC      240
ATGACCCTAA AAATACATGA GCAGCTCCTC CCTGAATCTT CAGCTGTACG ACCCTCAAAC      300
TACAACATCA GCTCCTGTCT GCACCTCCAG CTGCAGGGCC CTCAAACTAG AATATCAGCT      360
CCTCCCCGAG TCTTCAGCTG CACGACCCTC AACTAGAAC ATCAGCTCCT GTACAGATTG      420
CCAACGTAG GGCCCTCAAA CTAGAACATC AGCTCCTCCC CTCGAG                        466

```

(2) INFORMATION FOR SEQ ID NO:959:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 137 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

```

GGAGCATGTC CTGTTATTTA TTAACTTTT CCATTTTCAT TTTTATTG GGTAAGATAA      60
TTGCTTATGA TAAGCCTTGG GTGTGGAGAG CCGGTGCATA CAGAGTGGCG AGGCAAGCTT      120
CAATCTGCAG TCTCGAG                                          137

```

(2) INFORMATION FOR SEQ ID NO:960:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

```

GAATTCGGCC TTCATGGCCT AGAGCCGCGG CTCATGCGCG GTGCACAGAG GCTTGTTTCA      60
CATCTGTAAC AACAGGAGGA GGCCAGCCT CGTGATGAGG AATAGCAAGG AGAGAATTCA      120
GCTCCAGTTC AAAAGCCTAC AAAATCTGAG ACTGTCAATT CTTTTATAAG GATTCCAGCT      180
TTCCCTCCTG GCCAGAAATG TTCAGCCTGG ACTCATTGAG AAAAGATCGG GCCCAGCACA      240
GGCAGCGTCA GTGCAAACTT CCCCACCCC GCCTTCCACC CATGTGTGTC AACCTACCC      300
CAGAAGGAAC CCTCGAG                                          317

```

(2) INFORMATION FOR SEQ ID NO:961:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

```

GAATTCGGGC TTCATGGCCT ACTCTGCTCA ACCTGCACAT CACCCACCAC AGTCACCAGC      60
ACAAATTCAG ATGCAACTAC AGCACGAATT ACAACAGCAA GCCGCATTCT TTCAGCCTCA      120

```

GTTTCTAAAC	CCAGCCTTTT	TGCCTCATTT	TCCTATGGCC	CCAGAAGCAC	TGCTGCAGTT	180
TCAGCAGCCT	CAGTTTCTCT	TTCCATTTTA	TATACCTGGG	ACGGAGTTCA	GCTTGGGGCC	240
AGATTTGCGC	TTGCCAGGCT	CTGCCACATT	TGGGATGCCT	GGCATGACAG	GAATGGCTGG	300
CTCCTTGCTT	GAAGACCTAA	AGCAGCAGAT	TCAAACCCAA	CATCAGTTTG	GTCAAACCTCA	360
ACTCCAGATA	CTACAGCAAC	AAGCACAACA	ATACCAAGCC	ACACAGCCCC	AGCTGCAGCC	420
TCAAAAACAA	CAGCAGCAGC	CACCACCTCC	ACAGCAACAA	CAAGCTCGAG		470

(2) INFORMATION FOR SEQ ID NO:962:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

GAATTCGGCC	TTCATGGCCT	AGGAGAANGA	CGTGCTGGTG	AACGTGAACC	TGGTGGATAA	60
GGAGCGGGCA	GANAAAAATG	TGGAGCTGCG	GAAGAAGAAG	CCTGACTACC	TGCCCTATGC	120
CGAGGACGAG	AGCGTGACG	ACCTGGCGCA	GCAAAAACCT	CGCTCTATCC	TGTCCAAGTA	180
TGACGAAAAA	CTTGAAGGGG	AGCGGCCACA	TTCTTCCGC	TTGGAGCAGG	GCGGCACGGC	240
TGATGGCCTG	CGGGAGCGGG	AGCTGGAGGA	GATCCGGGCC	AAGCTGCGGC	TGCAGGCTCA	300
GTCCCTGAGC	ACAGTGGGGC	CCCGGCTGGC	CTCCGAATAC	CTCACGCCTG	AGGAGATGGT	360
GACCTTTAAA	AAGACCAAGC	GGAGGGTGAA	GAAAATCCGC	AAGAAGGAGA	AGGAGGTAGT	420
AGTCCGGGCA	GATGACTTGC	TGCCTCTCGG	GGACCAGACT	CAGGATGGGG	ACTTTGGTTC	480
CAGACTGCGG	GGACGGGGTC	GCCGCCGAGT	GTCCGAAGTG	GAGGAGGAGA	AGGAGCCTGT	540
GCCTCAGCCC	CTGCCGTCTG	ACGACACCCG	AGTGGAGAAC	ATGGACATCA	GCACACTCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:963:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

GAATTCGGCC	TTCATGGCCT	ACAACAGCGT	TAGGTTTTTT	TTTNGTTNG	TTNGTTNGTT	60
TNGTTTTTTT	CCAACCCTCT	TTCGGATGGA	CGGGGAAAGA	GAGAAAGAAA	AANCGAGGGA	120
AAATCNACAA	AATGTGCGAT	GCAAAGAGTC	GATTTTCGCG	GGGTTTGTC	ACTTCGCCAC	180
TGCCGCACGC	GAATCGACGT	CGTCACGTGA	CGGTCTGCCT	CCGCCCTTAT	TAACTCTCAG	240
CCCAGCGGCG	GTTTCCAGGA	CCTCAGACTT	TTTGCCGAGG	CGGCAGTCCC	TAGACGAAGC	300
GAAGGAGGCG	GCGCCTGCCC	CGCCACAAG	AGCTGCCGCG	CGCGGGTGTT	ATAGCTCCAC	360
CCCATCTGCA	AAGGAAGGGG	GAGCGGAAAG	AGCGGGATCT	AGCGGGGAAC	TCGAG	415

(2) INFORMATION FOR SEQ ID NO:964:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

```

GAATTCGGCC TTCATGGCCT AGCGGGTCTT CAGACAAGTG GAAAAGGTGA GAGAGGAGAT    60
CAGGGCGCAG AGCCCCGTGG AGGCTGAGTT TCCATATGGG CAACTGAGCA CATCCTGCCA    120
CTCCACCTC GTGCCTCAGA ATNGACACCA GGCTACTCAT CTGGAGGTGA CCAAGCAGCC    180
AACCAATCGG GTCCCCTGGA GGTCTCAAA TGCCTCCCA TACCTTGTT CAGACCTCGA    240
G                                                                                   241

```

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

```

GAATTAATAG CCTGCAGGTT AATTACTCCC TGAAGGGTAT TGTGGAAAAG TATAACAAGA    60
TCAAGATCTC TCCCAAAATG CCAGTATGCA AAGGACACTT GGGGCAGCCT CTCAACATTT    120
TCTGCCTGAC TGATATGCAG CTGATTTGTG GGATCTGTGC TACTCGTGGG GAGCACACCA    180
AACATGTCCT CTGTTCTATT GAAGATGCCT ATGCTCAGGA AAGGGATGCC TTTGAGTCCC    240
TCTTCCAGAG CTTTGAGACC TGGCGTCGGG GAGATGCTCT TTCTCGCTTG GATACCTTGG    300
AAACTAGTAA GAGGAAATCC CTACAGTTAC TGAATAAAGA TTCAGATAAA GTGAAGGAAT    360
TTTTTGAGAA GTTACAACAC ACACCTGGATC AAAAGAAGAA TGAAATTCTG TCTGACTTTG    420
AGACCATGAA ACTTGCTGTT ATGCAAGCAT ATGACCCAGA GATCAACAAA CTCAACACGC    480
TCGAG                                                                                   485

```

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

```

GAATTCGGCC TTCATGGCCT AACGGCTCCC TCACTTGTGA ATTAAAGTCA GACACTGCCG    60
TAAGGTTCTT CTGGTTCCTG CTTTGTGGAG AAAGCTTTCA GCAGCAATAT CTGGGATCAC    120
TGGTGATTA AATGTCAGGC CTCGCATCAT TATTCTGCCC TGAGCTGATG GTAAACCGGG    180
CAGCCAGCCT TTTAGCTTTC ATCCAGCACG AGGGAACCTG CCTTCAGATG TGACACGTAC    240
AAGTCAAAAA AGCTCAGAGT CAGCTCCAAC GTCTATTGGA TCCCACTCTA TCGCCTTTAA    300
AAAGGAAAAG AAAATCGAAA CGAACTCGAG                                                                                   330

```

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AGGGTCGCAG	ACTCAAATGC	CCACAGGGGC	CAGGTTAGGT	60
TAGCGGCTGA	AGCAGTCTGG	GGAGAGGCAA	AAAGCAATGG	CAGGGAGGTG	GGACAGAGGA	120
ATGTGGGCCC	CAAACATATG	GGGCAGCTGC	TACTCAGTGC	CAGCTGTTTC	TCGCCATGGG	180
GGGAAGCGGG	ACCAGAGCCG	CCGGGTCTTC	GGCTTTTTC	AGAGGACGCA	TAACCCGGA	240
TTGTTATTTG	AACTGTCCTG	ACTTTGGTAA	GACTCTGTGA	CGGTGACAGT	GAAGGAGGCC	300
GACTCATCGT	CAATTTTACA	CAAGTACTCG	CCGGAGTCCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATGGCCT	AGGATGCAGC	CGAAAAGGAT	CGCAAGCTTC	AGGAGAAAGA	60
GAAGCAAATC	GAAGAGCTGA	AGAGGAAACT	GGAACAAGAG	CAGAAGCTCG	TGGAAGTGCT	120
GAAATGCAA	CTTGAGGTTG	AAAAACGAGG	GCAGCAGCAG	CGGCCCTGG	AAGCCCAGCC	180
CAGTGCCCA	GGTCATTCTG	TCAAGTCAGA	TCAGAAGCAC	GGCAGCCTTG	GCTCCTCCAT	240
CAAAGATGAG	GCCTCACTCC	CTGACTGCTC	CAGCTCCAGG	CAGCCCATCC	CAGTAGCCAG	300
CCACGCTGTA	GGCCAGCCCG	TCTCTACAGG	TGGCCAGACC	CTTGTTGCCA	AAAAGGCTGT	360
AGTTATCAAG	CAAGAGGTCC	CTGTGGGCCA	GGCAGAGCAG	CAGAGTGTCT	TCTCGCAGTT	420
TTATGTGAGT	TCCCAGGGAC	AGCCACCGCC	TGCTGTTGTT	GCTCAGCCCC	AGGCTTTACT	480
GACCACGCAG	ACTGCTCAGC	TGCTGCTCCC	AGTGTCCATC	CAGGGCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

GTGCCTCGAG	AAACTGCCTA	TTCAGAAACA	CAGAAACACC	GAGACCTCAA	AATCCCCCTGA	60
GAAGGACGTT	CCCATGGTAG	AAAAGAAGAG	CAAGAAACCC	AAGAAGAAAG	AGAAAAAACA	120
CAAAGAGAAA	GAGAGAGACA	AGGAGAAGAA	GAAGGAGAAG	GAGAAGAAGG	CTGAGGACCT	180
GGACTTCTGG	CTGTCTACCA	CCCCACCGCC	TGCCCCCGCC	CCCGCCCCCG	CCCCGTTTCC	240
ATCCACGGGG	GAGCTCAGTG	TGAACACTGT	CACTACCCCG	AAGGACGAGT	GTGAGGACGC	300
CAAGACGGAG	GCGCAGGGCG	AGGAGGACGA	TGCCGAGGGG	CAAGACCAGG	ACAAGAAATC	360
TCCAAGCCT	AAGAACAAGA	AGCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

GAATTCGGCC	TTCATGGCCT	AGCTTACACT	GGGCCAAGTG	CTTGCCAAGG	ATTCTCATGT	60
GACATTTCTT	TCAGTCCTGC	CGAGGACTTT	ATGAGGGAAG	CACCCGTGTT	TACAGAGGGA	120
AGGGGGCCTA	TGGGGTCTAC	AGCAGTGAGA	GCCTAGAGTT	CAGTCTGCGT	CTCTCTGATT	180
CCAAAGCCTG	TGATTGTGAC	TTCCATACTC	TCCCTAAGAC	ACATTCATAC	ATTCAACTGA	240
ATATTTATTG	AGCACCTACT	GTGTGCTAGG	GATAGAGCAG	TAAATGAATC	AGGCAAAAAT	300
TATTTACATT	CCACTGGGGC	TGACAAACCC	AAACAAGGAA	GAGGTGTAGT	GCTTCGGGTC	360
TCGAG						365

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

GCAAAAGTAA	TATGATTTGT	TTAAAATACT	CAGTCAACAG	GTATTCCTG	AAAATATTTT	60
CCATAGAAAG	TAGAATATGG	TTCTCCCGAA	TAAAACTGA	TCCATTTTAC	CTTTTCTTTT	120
CCCTTTTGT	TNNGGTATTT	TTTTTCTTT	TTTTCTTTNN	GCTTTTTTCC	TTAACTTTC	180
CAGCCAAAGG	CTTCTATGAT	CTTGATGCTT	TAAATGAAGC	TGCTTGGACA	AGTGCCCAACA	240
GCCAGTTGGT	TCCCTGTAAT	GTTTGTGGGC	GTACCTTCCT	GCCAGACAGA	CTGATTGTTC	300
ACCAACGATC	TTGTAAACCC	AAAGCTCTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

GCGCCCTCAC	CCCTCCAATC	CCCCCTCTGA	CCCCCTCTTC	CTCACATGGG	GTCGGGGGCC	60
TGGGAGTTCA	TTCTGGACCA	GCCCACCTAT	CTCCATTTCC	TTTATACAG	ACTTTGAGAC	120
TTGCCATCAG	CACAGCACAC	AGCAGCACCC	TTCCCTGAG	GCCGGTGGGG	AGGGGACAAG	180
TGTCAGCAGG	ATTGGCGTGT	GGGAAAGCTC	TTGAGCTGGG	CACTGGCCCC	CCGGACGAGG	240
TGGCTGTGTG	TTCACACACA	CACACACCTC	GAG			273

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

GAATTCGGCC	TTCATGGCCT	ACTCTGTCTC	AAAAAAAAAT	AGTAAGTTGT	GTAAAGAAAA	60
ATATTAATTA	TATAATATGG	CAGTTCCTAT	GAGAGTGTGG	CAAAAATCAA	GAGGGCTTGG	120
AAGTTTTTTC	TTTGCTCTTG	CAACTGGCTG	GATGCAGTTC	ATATATTTT	CAACCAGTAG	180
GTGGCACCCC	AACCTAATTT	TTTGCAGTTG	TAACTGGTG	GCAGAAGGGG	CAGGACTGAT	240
GGCTTGGGCA	AGACTGTTAT	GCCAAGTTCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

GAATTCGGCC	TTCATGGCCT	AGTGAGATAG	TACCAGATTT	AGAATATAAT	TTTATCTTTC	60
TTTAGCAACA	AGCCCTAACA	ATATCCAAAC	TAAATAAAAT	CATTACATGA	ATTACTTTT	120
TACAATCATT	CTCCTAAGGC	TCGAG				145

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

GAATTCGGCC	TTCATGGCCT	AGGAAATAAC	AGTTATTTCA	TCATAAAACA	GTCCCTTCAA	60
ACACACAATT	GTTCTGCTGA	AGAGTTGTCA	TCAACAATCC	AATGCTCACC	TATTCAGTTG	120
CTCTGTGGTC	AGTGTGGCTG	CATAGCAGTG	GATTCCATGA	AAGGAGTCAT	TTTAGTGATG	180
AGCTGCCAGT	CCATTCCCAG	GCCAGGCTGT	CGCTGGCCAT	CCATTCAGTC	GATCATCTCG	240
AG						242

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

CATGTGCACA	CTCGCACATG	CACATATGGG	CACGTGGGAA	GACGGGAGAA	GTA CTGTCAA	60
AGTATAAGGA	ACTGCAGAGG	TTGGGATTTA	CTGGAAGGGA	AGGGAGCACA	CTCGAG	116

(2) INFORMATION FOR SEQ ID NO:977:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 461 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

```
GAATTCGGCC TTCATGGCCT AGCATGGCAA CAGATATGTG GAGCATTGGA GTGTTAACAT      60
ATGTCATGCT TACAGGAATA TCACCTTTCT TAGGCAATGA TAAACAAGAA ACATTCTTAA      120
ACATCTCACA GATGAATTTA AGTTATTCTG AGGAAGAATT TGATGTTTTG TCTGAGTCGG      180
CTGTTGATT CATCAGGACA CTTTATGTTA AGAAACCTGA AGATCGAGCC ACTGCTGAAG      240
AATGTCTAAA GCACCCCTGG TTGACACAGA GCAGTATTCA AGAGCCTTCT TTCAGGATGG      300
AAAAGGCACT AGAAGAAGCA AATGCCCTCC AAGAAGGTCA TTCTGTGCCT GAAATTAATT      360
CGGATACCGA CAAATCAGAA ACCGAGGAAT CCATTGTAAC CGAAGAGTTA ATTGTAGTTA      420
CTTCATATAC TCTAGGACAA TGCAGACAGT CAGAACTCGA G                                461
```

(2) INFORMATION FOR SEQ ID NO:978:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 108 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

```
GAATTCGGCC AAAGAGGCCT AATGATGATG AATAAGTTGG TTCTAGCGCA GTTTTTTTTT      60
TTTCTTGTCT ATAAAGCATT TAACCCCCCT GTACACAACT CACTCGAG                        108
```

(2) INFORMATION FOR SEQ ID NO:979:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 505 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

```
GATGGCGTCG GGCAGCGGGA CAAAAAATT GGACTTTCGC CGAAAGTGGG ACAAAGATGA      60
ATATGAGAAA CTCCCGGAGA AGAGGCTCAC GGAAGAGAGA GAAAAGAAAG ATGGAAAACC      120
AGTGCAGCCT GTCAAGCGAG AGCTTTTACG GCATAGGGAC TACAAGGTGG ACTTGGGAATC      180
CAAGCTTGGG AAGACAATTG TCATTACCAA GACAACCCCT CAATCTGAGA TGGGAGGATA      240
TTACTGCAAT GTCTGTGACT GTGTGGTGAA GGAATCCATC AACTTTCTGG ATCACATTAA      300
TGGAAAGAAA CATCAGAGAA ACCTGGGCAT GTCTATGCGT GTGGAACGTT CCACCCCTGGA      360
TCAGGTGAAG AAACGTTTTG AGGTCAACAA GAAGAAGATG GAAGAGAAGC AGAAGGATTA      420
TGATTTTGAG GAAAGGATGA AGGAGCTCAG AGAAGAGGAG GAAAAGGCCA AAGCGTACAA      480
GAAAGAGAAA CAGAAGGAGC TCGAG                                505
```

(2) INFORMATION FOR SEQ ID NO:980:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 314 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

CGAGGGACAT GAGGCTGAGC TGGTTCCAGG TCCTGACAGT ACTGTCCATC TGCCTGAGCG	60
CCGTGGCCAC GGCCACGGGG GCCGAGGGCA AAAGGAAGCT GCAGATCGGG GTCAAGAAGC	120
GGGTGGACCA CTGTCCCATC AAATCGCGCA AAGGGGATNT CCTGCACATG CACTACACGG	180
GGAAGCTGGA AGATGGGACA GAGTTTGACA GCAGCCTGCC CCAGAACCAG CCCTTTGTCT	240
TCTCCCTTGG CACAGGCCAG GTCATCAAGG GCTGGGACCA GGGGCTGCTG GGGATGTGTG	300
AGGGGGACCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

GAATTCGGGC TTCATGGGNT ACTCATTGCT ACATTGCTAG TTGACCCGCA GTTATATTC	60
CTTTTTTCT TTTAATAAA AGGCAAGAGA AACAATCCGT TTTTGCCTTT TCCTACCACA	120
TCTTTGACTT TTCTGATTCC TGCAAGTTTA AGTTAAAAAC ATCCTACCTT CAAGTACAA	180
AATGCAGCAC ATCCCAGGAC ATCCCTCACC TGCTTTGCTT GTTTATTAGA CACAGTGGC	240
TTTGTTCAGA AAGTTACTGG GAACCGCTAA GGATAGTCAA GGTGGAGAAC ACAGGGTGGG	300
GTCTCAGAGT CTGAGGCCTT GGTTCAGGTT CCTGATAACA TTAAATATAG AAAATACACA	360
GCACAAGGCC AACTCGAG	379

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 362 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

GAATTCGGCC TTCATGGCCT AGAAGATGGT AAGGTTTCGAA TCTTTCGGGT GATGGGAGTT	60
AAGTGTAAC AGGAACTGGG ATTTAAGGGC CACACTTCAG GGGTATCCCA GGTCTGCTTT	120
CTCCAGAAT CCTATTTGCT GCTTACTGGA GGAATGATG GGAAGATCAC GTTGTGGGAT	180
GCAAAACAGTG AAGTTGAGAA AAAACAGAAG AGTCCCACAA AACGTACCCA CAGGAAGAAA	240
CCTAAAAGAG GAACTGTCAC CAAGCAGGGT GGAAATACTA ACGCTTCAGT AACAGATGAG	300
GAAGAACATG GCAACATTTT ACCAAAGCTA AATATTGAAC ATGGAGAAAA AGTGAACTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

```

GAATTCGGCC TTCATGGCCT AGGCCACTGA TATTTTCTA AGTTAGCAAG GCTCACTTGC      60
TTGCTTTCCT GCCTCCCTTG CCTCCATCCC TCTCCCTTCC TACCTTCTCT ATTTACCTAT      120
TTCTCTCCCT CCCTCTCTTC TCCTCTCTTT TTTTTCCTCC CGCATATGCA GCTTTTIGAT      180
TGTACTTGAT TTTATAGAGA CTGCACAGTT CCAGCAAGAT TGGGAGTCAG GCATGGAGCA      240
GGCATCTCAG GCTACCAGAA AGAATTGGTC ACCTAGACTT TCAGTCAGGC ATCCTCGTTT      300
GCATTGTCCT GTAAGTCAAT TAGTTGATAA ATAGTTCCCT CTCATCCCT TAAGTTTGT      360
TTTTGTTTTT GTTTTAATA TAGGTAAGTG GGACTCTACC TAAAATTTTG CATCATACTT      420
ATGGGTAATA TCTTTTTCAT ATATTATTTA TCAAAGTATG AAGTTGAGTA TTTTGCTTGT      480
ACCATTTCAA TTCTGCATTA TAGTAGTTCA TTGTATAACT GAAAGAAATG ATTTCTTCAT      540
AAGTGACATT AAATATGAAC ATTCATCTCT CGAG                                     574

```

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

```

GAATTCGGCC TTCATGGCCT ACGATTGAAT TCTAGACCTG CCCCTCCCT CCATGCCTCA      60
TCCCGGCC CCTCCAGTCA TGCCGCAGCA GGTTAATTAT CAGTACCCTC CGGGCTATTG      120
TCACCACAAC TTCCACCTC CCAGTTTAA TAGTTCCAG AACAAACCTA GTTCTTCTCT      180
GCCAGTGCT AATAACAGCA GTAGTCTCA TTTCAGACAT CTCCTCCAT ACCCACTCCC      240
AAAGGCTCCC AGTGAGAGAA AGTCCCACT CGAG                                     274

```

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

```

GAATTCGGCC TTCATGGCCT AGATAAGGAG ACTTCAGAAG AGAAGCCGCC AGCTGAGGGA      60
AGTGAGGACC CTAAGAAGCC ACCCGCCCT CAGGAGGGAA CAAGATCTAG CCAGCGAGAT      120
CAGATACTCT ATCTCTTGG GAGAACTGGC CGAGAAAAAG AGGAATGGTT TAGGAGATTT      180
ATTCTGGCAT CTAAGCTAAA GTCGGAAATC AAGAAGTCAT CGGGTGTCTC TGGAGGTAAA      240
CCAGGGCTTT TGCCTGCACA CAGCAGACAC AACAGTCCGT CCGGGCACCT GACCCACAGC      300
CGCAGCAGCA GCAAAGGCAG TGTGGAGGAG ATCATGTCAC AGCCAAAGCA GAGGGAGCTA      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

```

GAATTCGGCC TTCATGGCCT ACTCTCTTCC AACCAAAAGT CTTAATATGG GAATATCCCT      60
CACCACGATC CTAATACTGT CAGTAGCTGT CCTGCTGTCC ACAGCAGCCC CTCCGAGCTG      120
CCGTGAGTGT TATCAGTCTT TGCACTACAG AGGGGAGATG CAACAATACT TTAATTACCA      180
TACTCATATA GAAAGATCCT GTTATGGAAA CTTAATCGAG GAATGTGTTG AATCAGGAAA      240
GAGTTATTAT AAAGTAAAGA ATCTAGGAGT ATGTGGCAGT CGTAATGGGG CTATTTGCCC      300
CAGAGGGAAG CAGTGGCTTT GCTTCACCAA AATTGGACAA TGGGGAGTAA ACACTCAGGT      360
GCTTGAGGAC ATAAAGAGAG AACAGATTAT AGCCAAAGCC AAAGCCTCAA AACCAACAAC      420
TCCCCTGAA AATCGCCCGC AGCATCTCGA G                                     451

```

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

```

GAATTCGGCC TTCATGGCCT AGAGAAACTG AGCAAAAATA GCTGCCAAGA GAAGAGGGAA      60
CGAGTGCTCG GGGCGGGTTG GAGGCAGATA ACGAGAAGGC AAGAAAATTC TTTGTCTTTG      120
GCTCCTGCTG TCAGCTCAGA GGGGTCATCT TGAGATGAAA AAGAAAAGTC CCCAGCCTTG      180
GGGAAGGAAA GGAGAGGGTG CCCACGCAG ATATGAAGCA AAGCCATTGG CAAGATATTC      240
TCTCTAAGGA GAGCAGCGGT CTTGCCAAG GCATCTTCTA TTGTGTATTG CCGTCATAAA      300
CCCTACCCTT CCATGTAGAT AGCCAGGACT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

```

GAATTCGGCC TTCATGGCCT AAGAGAAACA AAAATGATTT TGCTTTCCAA GCTTGGTTTG      60
TGGCGTCTCC CTCGCAGAGC CCTTCTCGTT TCTTTTTTAA ACTAATCACC ATATTGTAAA      120
TTTCAGGGTT TTTTTTTTGG TTTAAGCTGA CTCCTTGCTC TAATTTTGGA AAAAAAGAAA      180
TGTGAAGGGT CAACTCCAAC GTATGTGGTT ATCTGTGAAA GTTGCACAGC GTGGCTTTTC      240
CTAAACTGGT GTTTTTCCCC CGCATTGGT GGATTTTAT TATTATTCAA AAACAAAATG      300
AAAAGGTTAT TTAATTTTTT TTTCTGAAA TGCTGACAAT ATGTGATATC TTAATATCTG      360
TAATTCCTAG TGAAAGTTAT GGTATAGTAT AGGTGAAGCT GTAGTGTTTA TATCAATAGA      420
TGTGAATTCA AATGAGCAAT CTAATAATTA TTTACTATTC AATTATGTTA ATTTTCTTCT      480
CTTTGTCTCC CATTGTATCT GCACTCGAG                                     509

```

(2) INFORMATION FOR SEQ ID NO:989:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

```

GAATTCGGCC TTCATGGCCT AGGCTTGTGG GCAGGGCCCCG TGCAGGTCAT GGAGCCGGTA      60
GCATCTCAGA GCTGGACAGA GGAGGTAGGC TGGGAGCAGG CCCGGTTGGG GACCAGTGGC      120
CCCTGCACAG GAGCCAGAGG GCCTGGGCAG CTGTCTGTCC AGAAAGCATG CAAGACCCCG      180
TGCCACCCGG GCACACAGGG CTGTCGTGTC TAGAAAGAGA TCTCCTGGGG TCACGGGCAG      240
GCAAAGCTGA TTGATTTTGG CCGTGAAGTT TGACCTTGTG ATGGAAACCG AGCTCCCAGG      300
GAGTGAGACA AACTGCCTCC CCGTGCAGT GGCCAATAAA CCTGACTTGG TTTTACAGCC      360
CCGAGAAATT GCTCACTAAT AGCCAGACAG ATGCTCCCCC TGCCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:990:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 210 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

```

GAATTCGGCC TCATGGCCTA CCCAAATCTG AAGTCTTTGG ATATGTTACT GCTGAAGTTT      60
CTATCACTTC TCACTCCTGG TTCCTTGTTT CCCTGTATGC TTTTTTTTTT TTCCATGAG      120
TTCACTTTTT TAAATTATAG TTCTCAAGG CCTAGGATGC AGGTGTGTTC TTCCATAAAG      180
GGCTATTTTG CCTCTGCCGA GGTCTCGAG      210

```

(2) INFORMATION FOR SEQ ID NO:991:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 447 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

```

GAATTCGGCC TTCATGGCCT AGTAGATAGT AAAAAATTCA ACAGATATCA AAGTGTGTTA      60
AGTTTACCTT TCCACCCACT TTCTCATTTT TGTCTCCCCC AGTTCCTTTT GCATTATTCC      120
ACGTATATTC TGTGCATATA TACATTATAT TACATTATAT TGTATGTGTC AGCTTCTTTT      180
TACACAAATG ATACATAAAC ACTGTTCTGG ACCTTCCAAC TTAGAATTAC TGCAAACAGT      240
GTCGTGATGA ATTACCTAAT TCTGTGTATG TGTGTATATT GGTAGAAAAA ATTCCCGGAA      300
GTAGAATTGC TAGAACAAGG ATTTATGCAT TTAAATATT CCTTTATTAT AAAACTAATG      360
AAAGTAAACA TGTGCGCTAT GACCACGTAT GCTCTATGCT CAGTTTTTCT AGAGTTGTGT      420
ATGCTTAATA TAGGAGCCTG CCTCGAG      447

```

(2) INFORMATION FOR SEQ ID NO:992:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 303 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

```
GAATTCGGCC TTCATGGCCT AGCCCATGTG TGTTATTTT GAATTAATTT CAAGCTTACA    60
GAAGAATTAT AAGAATTATA CAAAGAGCCC TTGTATAGCC TTCATCCAGA TTCCTCATT    120
ATAGTTATCT CCCCACACA CGTAATGCAC AGACACTGCA TGCATTTTCC TTTTCTTTT    180
TCTCTTCTTT CTTTTCCTTT TTCTCTCTTT CCCTTTCTCT TCTCCCTCCC CTCCTCCACC    240
CTCCCTCCC TTCCTCTCCC TTCCCTCCT CCTACTTCAG CCTCTAGAAT AACTAGACTC    300
GAG                                                                    303
```

(2) INFORMATION FOR SEQ ID NO:993:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 359 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

```
GAATTCGGCC TTCATGGCCT AGGATTTGGT AGGGTAACTT GAAACTGAG TTAAATGAGA    60
AAGGTAGAAA AAATTCGTAC TTTTCTCCT CCCCACAAA AATAAAAAACA GTAAATCTT    120
TACCAACTGA AAAAGCTGTT GAAATTTTCT GTATGTTAAA AAAATGAGCT TTGCAGTAAC    180
TCTTAAATC ACCTAGCAA ATAGGAAC TAATGTGCAT CTTTCCTTCA CTAATACATT    240
TATTGCATCT CTTCTTGATG CTGATGATTG AGGACACACA TTCTGCTTTC CTGGGGCTTA    300
TGGTTTATA TAAAAACCAA AGCAAAGTAG AAAGTATACC TCCTACCAAG GGGCTCGAG    359
```

(2) INFORMATION FOR SEQ ID NO:994:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 406 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

```
GAATTCGGCC TTCGGCCTTC ATGGCCTAGA GGAGGACCAA GGCTTCAAAG GCCCCTGCCC    60
GCGCGTCCTG CAGGTTCCCA TTGTCCGTGT TAATAGCCTC AGATGGGCAT CAGTTGCCCT    120
GATGGGCTTG GGCTCCACGC CCGGGCTTGC ATGTTTGCCA AAATTACTCA AGAGCATTTT    180
TTTTTTTTTT CTTTGAGACT CCGTCTCAA AAAAAAAAAA AAAGAGATCC TCAGCTGTG    240
TTTCTTGAAT CAGATATTTG GATCACTCTA GCATCCAATC ATGCAGCTCC TAAATATGCT    300
CCTAAATCAT GCAGGTCCAA TCACGCACCT GTTTACGGT TTATCAATTT GTGCTCATCC    360
TGAACATAAT AACAAATCC ATGAGCCAAC TGCAGCACC CTCTGAG    406
```

(2) INFORMATION FOR SEQ ID NO:995:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 603 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

```
GAATTCGGCC TTCATGGCCT ACCATCTTGG AACCTCCTCC CATGATTGCC TTATTATTTT    60
AAATACATTA ATGTAGATCA ATGAAGAATA AGAAAATAAG CAATTTTATT TTACCTTAAT    120
TTATTCTGTT TCTGATGCTC TTGTCTCTC TATGTAGGTC TGACTTTTGT ACCTACATTA    180
TTTTCTTTCC CTCCTAGGAA TTTTAAAAAG CATTTCTTGT AAGGCAGGGC TACTGAAAAC    240
AAATTTCCCTC AATATTTGCT TGTCTACAAA AGTCTTTATT TCTCCTTTAC CTTTAAAGGG    300
AAATTTTACA ACCTACAGAA TTCTAGGTTG GTGGGTTTTT TCCCCCTCAA TCCCTTAAGT    360
ATTTAATCC TCTCTTCTTG CTTCATGGT TTGTAAGGAA GAGTCAGATG TAATTTTAT    420
CTTGCTTCT GTATGGGTAG GGTGCTTTT CTCTAGATT TTTTTCAG AGTTTTCAG    480
TTTATCTTTG ATTTCTGTA CTTCAAATAT ATTATGCCCA GGTATAGATT GTTTTGTGTT    540
CTTGTTTTGT TTTCAATTGG CATTTGTCT GCTTGGTGT CTCTGAGCTT CCCGGATCTC    600
GAG                                                                    603
```

(2) INFORMATION FOR SEQ ID NO:996:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 461 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

```
GAATTCGGCC TTCATGGCCT ACAGAGAATG AAACATGGAG CTCACATTCT GATGGGGGAG    60
AAATAAAAT CATATCAGAT GGTGATGAGC TTTCGGTTT TCTATTCTA TTTATGAAGA    120
ATAAAATAAG GTAATAGAGA TAATGTGATG AAAATTCTAA CATTCTCTAC CTTTCCTGAA    180
TTCTTAATCT ATACCTTCTG TTCTTACATT TTCTACTTAA TTTATTTAA TACAACCTGT    240
AGCTAAACTT TTATTTTCT TCACTCCTG ATTCTTAACC CCTATCCATG CTAATTTTGT    300
CCTTCACTAT TCCACAAAAC TTACCCACTG TCGTATTATT ATCTTCTATT AAAAGCCAGT    360
ATTCTCTTTT CAGTTTTTAT CCTTCTTGAT CTACACTGAA CATGATTGCC TTTCTCTCTC    420
TTATATCACT TGCTGCTATC TGCAGTCCAA CTAGCCTCGA G                                                                    461
```

(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 470 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

```
GAATTCGGCC TTCATGGCCT AGTGATTGG GTACAGACAC AGCCAAACCA TATCATTACA    60
GATATAAATC TCTGAGTAAA TCCGGTGTGTT GATTCTTCT AGCTTTTGT CTTATGAGTA    120
GAGGTCTTTC TCCTTACTC CAAGAATTTT CATAGACACA CCACTTAGTA CTTACGTTTA    180
CCACCATTGT TATTATTTT AAGAATGTAC TACTTTATAT TTTTAAACAT GAAGGACTAG    240
CTCAAAATTT TGTAGCTTCC CCCCCGCC CAATCTTTT TTTTCTTTG ACTCCTTTGT    300
```

GATGGGTAGT GGTTTAAAGA CAGCAAAACA TGACCTTAAC CAGAACACTA ACTAGCTTTA	360
TACATAATTC AGCCTATGAA CATGTATCTG GCAAGAGAAA TTCCTGATCT GTGGTTCGGC	420
AGATCCATGA GAGCTGCTTC TCCGGATTTT CTTTGCTGGC CCCTCTCGAG	470

(2) INFORMATION FOR SEQ ID NO:998:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

TTTAAAGAGA GTTGC GTTAT TTTCTCCAAA AGCATTGTGTT GAGTTGGTCA TTTTGACAGT	60
TAACTGTCCG TTTTACCTG CATTCCTAGG TGCTAAACT TACAAGTGA TCTCTGAAC	120
ACAGGCATTG ATCCTCTACC AATGAATAAT TGAGAGAGGT AGGAATGACT GATTTTCTA	180
GTTGTAGTTT GAAAGATTAA TTTGATGAAT TGGAAAGTAT GGAACTATT CTGTTACTAT	240
TGCAAGAAA GATTATTTT TTTAAAAAAT TTATTTTAT TTATTTTATT TTATTTT	300
GGGCAGGTCT GGCTCTGTCA CCCAGGCTGG AGTGCAGTGG CAGACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:999:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GGAGTATTGT TACAATCACA TTTGAAGTAC CAGGAAATGC AAAGGAAGAA CATCTTAATA	60
TGTTTATTCA GAATCTCCTG TGGGAAAAGA ATGTGAGAAA CAAGGACAAT CACTGCATGG	120
AGGTCATAAG GCTGAAGGGA TTGGTGTCAA TCAAAGACAA ATCACAACAA GTGATTGTCC	180
AGGGTGTCCA TGAGCTCTAT GATCTGGAGG AGACTCCAGT GAGCTGGAAG GATGACACTG	240
AGAGAACAAA TCCATTGGTC CTCGAG	266

(2) INFORMATION FOR SEQ ID NO:1000:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GTAATGGGAG ATGGACATCC ACTGTTTCAT AAGAAGAAGG GGAACAGAAA GAAGCTAGTA	60
GAGCTGGAGG TGGAGTGCAT GGAAGAGCCT AATCACCTTG ATGTGGACCT GGAGACCCGG	120
ATCCCTGTCA TCAATAAGGT GGATGGTACT TTGCTGGTGG GTGAGGATGC CCCTCGCCGG	180
GCTGAACTGG AGATGTGGT ACAGGGTCAT CCAGAGTTTG CTGTTGATCC CCGATTTCTA	240
GCGTATATGG AGGATCGCAG AAAACAGAAG TGGCAAAGAT GTAAAAAATA TAATAAGGCA	300
GGACTCGAG	309

(2) INFORMATION FOR SEQ ID NO:1001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

```

CACGTCAGGA GAATAGAATG GAAAATTTT ATTTCAACAG AAAGAAGTTA ATTTAGAAAA    60
TTAGTTTAAA ATACATTGGA AAACCTAAAG AGCAAAAAGC ATTTGTAAAC AAACAAAAAA    120
TAAACCAAAA AAACCTGAT GAGGTTACTA CTAATAGTAA CTGTAGGAGG CATCTACCTC    180
CCTAGATTGG GGAAAGAAGT AGTGGTTGAA TTATCAGAAC CTAGAAGCAC AGAACAGGGG    240
CCCCTCAGAA TGTGTTCTCA GACTCCTGAG GGAAGGATGC TACCCAGCTA CAGCTGGTTC    300
CTCGAG                                         306

```

(2) INFORMATION FOR SEQ ID NO:1002:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```

GAATTCGGCC TTCATGGCCT ACACCCTGCT AATTTTGTGA TTTTITTTTG TAAAGGCTGG    60
GTCTCACTAT GTTGCCCAGG CAGGGTCTCG CTATGTTGCC CAAGTGGGTC TCGAACTCCT    120
GGGTTCAAGC AATCCTGCCT CGGCCTCCCA AAGGGCTGGG ATTACATGCA TGAGCCATCA    180
CATCTGGCCC CCACCCATCT TAAAAGTCAG AAATAAAAGC CAGAGCCCCT CCTTGACCTC    240
CTGGCCCCCT CCGCTTTATC ACCCCACCTC TCTGCCTGTC TTTATTGCAA AACCCCCAGA    300
AGGTTATCAG GCTCATGGTC TTCCCTCCTG TCCCACTGTC CCCAACTACA CAATGAGATG    360
CCCCCATTCC AACTCCCCAG CCTCCTCTGC TGGCGTCTCC TCCTTCCTAA TCTCTGAACA    420
TTGTCCCATC CAAGGGCTCA GTCCCAGTTC CGTTCACCCC TTGTCCACAC TCACCCTGAG    480
AGCTTCCAGT CTGTGGCCTC CATGCCCTGG AATGAGCCCC TGTAAGATCC ACAATCTCGA    540
G                                             541

```

(2) INFORMATION FOR SEQ ID NO:1003:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 602 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAAACGCCTC CTGATTTTGT CTTACAATGG AACTTAAAAA GTCGCCTGAC GGTGGATGGG    60
GCTGGGTGAT TGTGTTTGTG TCCTTCCTTA CTCAGTTTTT GTGTTACGGA TCCCCACTAG    120
CTGTTGGAGT CCTGTACATA GAATGGCTGG ATGCCTTTGG TGAAGGAAAA GGAAAAACAG    180
CCTGGGTTGG ATCCCTGGCA AGTGGAGTTG GCTTGCTTGC AAGTCCTGTC TGCAGTCTCT    240
GTGTCTCATC TTTTGGAGCA AGACCTGTCA CAATCTTCAG TGGCTTCATG GTGGCTGGAG    300

```

```

GCCTGATGTT GAGCAGTTTT GCTCCCAATA TCTACTTTCT GTTTTTTCC TATGGCATTG      360
TTGTAGGTCT TGGATGTGGT TTATTATACA CTGCAACAGT GACCATTACG TGCCAGTATT      420
TTGACGATCG CCGAGGCCTA GCGCTTGGCC TGATTTCAAC AGGTTCAAGC GTTGGCCTTT      480
TCATATATGC TGCTCTGCAG AGGATGCTGG TTGAGTTCTA TGGACTGGAT GGATGCTTGC      540
TGATTGTGGG TGCTTTAGCT TAAATATAT TAGCCTGTGG CAGTCTGATG CGACCCCTCG      600
AG                                                                                   602

```

(2) INFORMATION FOR SEQ ID NO:1004:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 378 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

```

GCGGCAATGA TACCCACTGC CAACCAACAA AAATTGGCTG CAACCATCCC CTACCAGGAC      60
CGAGCCCCTA CAGGTGAGCG GCTCTGCCAG GCCCTGGCTC CTGCCCAGCAT GCACCCAAGC      120
CGGAGCCTGG GGCAGCTCCT ACGAGGCTCA CCAGGGCCCC AGCAGGATGC CTGGGTCCCC      180
TGCTCCTGCT TGGCCAAAGG GAAGAGGAAG CAGCAGGCAG GGGCTGGGGA GGCTTCATG      240
AATTACATGA ATTATCCTTC TTTTTTTTTT TTCCCTTTT TTTTTTTTTT TTTTTTTTTT      300
TTTTTTTTTT TTTTTTTTTT TGAGANNCCA NTTNAAAAAA AAAAGGGGGG GGTGTCAGGG      360
TTTCATTCAG AGCTCGAG                                                                 378

```

(2) INFORMATION FOR SEQ ID NO:1005:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 208 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

```

GAATTCGGCC TTCATGGCCT ACTGTTTAT TTCCCGCTTT TATTTTGCTT TTGAAATCTT      60
TTTCCTTGGT GGATTGTGAC GTGTCTTCAC TAGATGCCTC AAATTAAGTC TGACCACAAT      120
CCTACTCTAC TTCTACAGT GGAGAGACCA TCCTCCCTGC CCCAGGGCTG TCTCCACCCA      180
CCCCCCTTC CCCACCGCA CCCTCGAG                                                                 208

```

(2) INFORMATION FOR SEQ ID NO:1006:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 396 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

```

CTGATCTGTG AACCTTACAC GAGCAAGGAA TTATCCGGG TTTTGATAC ACCCTACTTA      60
CTAAATGAAG ACTGGGAATA CTATCTCTCT GGAAGCTAT TTAATAAATC AAAAATGAAG      120
CTCACTTTTG AACAAAGTTA CAGTGACTGC AAAAAAATA GAGGCACTTA CGGCACTCTT      180

```

CACCTGCAGA ACAGCTTCAA TATCAGTGAA CATCTCAACA TTAATGAGCA TACTGGAAGC	240
ATAAGCAGTG AATTGGAAAG TCTGAAGGTA AATCTTAATA TCTTTCTGTT GGGTGCAGCA	300
GGAAGAAAAA ACCTTCAGGA TTTTGCTGCT TGTGGAATAG ACAGAATGAA TTATGACAGC	360
TACTTGGCTC AGACTGGTAA ATCCCCGCT CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

GAATTCGGCC TTCATGGCCT AGATGGGGGC TAGTTTTTGT CATGTGAGAA GAAGCAGGCC	60
GGATGTCAGA GGGGTGCCTT GGGTAACCTC TGGGACTCAG AAGTGAAAGG GGGCTATTCC	120
TAGTTTTATT GCTATAGCCA TTATGATTAT TAATGATGAG TATTGATTGG TAGTATTGGT	180
TATGGTTTCAT TGTCCGGAGA GTATATTGTT GAAGAGGATA GCTATTAGAA GGATTATGGA	240
TGCGGTTGCT TGCCTGAGGA AATACTTGAT GGCAGCTTCT GTAGCTCGAG	290

(2) INFORMATION FOR SEQ ID NO:1008:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GTGGTTCTGA AATCACCCTT CCTTTTCACT CCTCTGCCCT GACTTCCTCT CTCACCATGC	60
TCTCTGCTC TCCACCTTCA CCTCTTCAG TGGGATTCT GCATTCAGC CAGAGGGACC	120
TGTCTGCAGC TACCAGATGC TCCCCACCCT GGGAGAGCTC AGCGGCATGT CTGCACATGG	180
GCCTTTTCAG CCTTCTTCAT CCCGCAATTG GAACTGACTT TCCCACTCCC ATCTCACACT	240
TGAGAATCTC TGTTTCTTGT TTCTTGTTT TTATTTTATT TTTATTTTCT CTCCCCCTG	300
GCGGACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:1009:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GGANCAGAGT CCAANAGATN AATTATATTC AGAAAACCTCT GTTCAAGATA GGGTATGATT	60
ACAAATTGGA ACAGATCAAA AAGGGATATG ATGCACCTCT TTGCAATCTG TTAAGTTTAA	120
AAAAGGTCAA GGCCCTGCTG GGAGGGAAATG TCCGCATGAT GCTGTCTGGA GGGGCCCCGC	180
TATCTCCTCA GACACACCGA TTCATGAATG TCTGCTTCTG CTGCCCCAAT GGCCAGGGTT	240
ATGGACTGAC AGAATCATGT GGTGCTGGGA CAGTTACTGA AGTAACTGAC TATACTACTG	300

GCAGAGTTGG AGCACCTCTT ATTTGCTGTG AAATTAAGCT AAAAGACTGG CAAGAAGGCG 360
GTTNTACAAT TAATGACAAG CCAAACCTGA G 391

(2) INFORMATION FOR SEQ ID NO:1010:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 415 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

GGGGAAGAAA GGCCTAAGGA TGGTGAAGCT GAACAGTAAC CCCAGCGAGA AGGGAACCAA 60
GCCGCCTTCA GTTGAGGATG GCTTCCAGAC CGTCCCTCTC ATCACTCCCT TGGAGGTTAA 120
TCACTTACAG CTGCCTGCTC CAGAAAAGGT GATTGTGAAG ACAAGAACGG AATATCAGCC 180
GGAACAGAAG AACAAAGGGA AGTCCGGGT GCCGAAAATC GCTGAATTTA CGGTCACCAT 240
CCTTGTCAGC CTGGCCCTAG CTTTCCTTGC GTGCATCGTG TTCTGGTGG TTACAAAGC 300
CTTCACCTAT GATCACAGCT GCCCAGAGGG ATTCGTCTAT AAGCACAAC GCTGTATCCC 360
AGCCTCCCTG GATGCTTACT ACTCTCCCA GGACCCCAAT CCCAGAAGCC TCGAG 415

(2) INFORMATION FOR SEQ ID NO:1011:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 407 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

GCCAGACTAC CACAAGCCCC ACCCACAATA TGCCAAGCCC TACCCATACC ACAGCAAGCC 60
CCACTCATAC TTCCACAAGC CCCACCCATA CCCCACAAG TCCCACCCAC AAAACCAGTA 120
TGTCACCTCC CACCACTACA AGTCCTACCC CCAGTGGTAT GGGCCTAGTC CAGACTGCCA 180
CAAGTCCAC CCATCCTACC ACAAGCCCCA CCATCCAC CACAAGCCCC ATCCTTATAA 240
ATGTAAGCCC TTCCACTTCT CTAGAACTTG CTACCCTCTC CAGCCCCTCC AAACACTCAG 300
ACCCACCCCT CCCAGGCACT GACTCCCTTC CTTGTAGTCC CCCAGTCTCC AATTCCTACA 360
CTCAGGCAGA CCCTATGGCC CCCAGAACTC CCCACCCAAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1012:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

GAATTCGGCC TTCATGGCCT ACGCCGCCGC CACAATGGGC CGCGGAGTTT GGAATCTGA 60
CGCGGATGCG GCATGTGATC AGCTACAGCT TGTCACCGTT CGAGCAGCGC GCCTATCCGC 120
ACGTCTTCAC TAAAGGAATC CCCAATGTTT TCGCGCCGAT TCGGGAGTCT TTCTTTCGCG 180
TGGTGCCGCA GTTTGTAGTG TTTTATCTTA TCTACACATG GGGGACTGAA GAGTTCGAGA 240

GATCCAAGAG GAAGAATCCC GCTGACCATT GAATTCTAGA CCTGCCTCGA G

291

(2) INFORMATION FOR SEQ ID NO:1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCT TCATGGCCTA TGGATTACCT GAGGAAGAAG AGATCAAGGA AAAAAAACC	60
ACCAAGTCAAG GAAAGTCAAG TAGCAAGAAG GAAATGTCTA AAAGAGATGG CAAGGAGAAA	120
AAAGACAGAG GAGTGACGAG GTTTCAGGAA AATGCCAGTG AAGGGAAGGC CCCTGCAGAA	180
GACGTCTTTA AGAAGCCCCCT GCCTCCTACT GTGAAGAAGG AAGAGAGTCC CCCTCCACCT	240
AAAGTGGTAA ACCCACTGAT CGGCCTCTTG GGTGAATATG GAGGAGACAG TGACTATGAG	300
GAGGAAGAAG AGGAGGAACA GACCCCTCCC CCACAGCCCC GGCAGCTCGA G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 596 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GCTCGAGTCG GATCCTCCCT GAATGTGGAG CGATGGGGGG TTGCACACAG GCCGTTCTGC	60
CCCAGCAGCT AACAAGAAAG ACCCTTGCAT TCCTCCCTGC ATCTCTCCCT TTTGGGTCCT	120
ACTAATGTCT GTTGAATTTC TCTTTTTC AAAGCAAAAT CCTTCTCTGC ATTTTGTCTG	180
CTTGTCTGTT TCCCAGAGCC GCAGGACTCT CTCCTTGCTT GGAGTTCCAG AGAGCCCCCA	240
CTTTCTCTTT CTAAGCTGTG TTGTGTGTTT CCTGGTACAT TCTAGGTTCC CCAAAGATAA	300
ACATGACTAA GGATTGGAAA GGAGGAAAGG CCGCGCAGAT TGTTAATCTG AAAGTCAATC	360
CCCGGATTTA GCTCTCAAAA ATGCTTTATT TTTGGAGAAA AGCAATAGAG TAAGACAGAA	420
GGACTTAACG CTTGCAGGGA AGTGGCTTTC TGCCATGTAG AGCCAGGCTG GCAACCTGCC	480
CTCTGCCATC AGGGAGTGAG CATGAACCTG GAAACCTCTA GGACGCAAGA GCGAGGCTGG	540
CTGTCCCCTC GTGTGCAGTG CTTAGACCTT CTTGCCACAC ATCCCATCCC CTCGAG	596

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC TTCATGGCCT ACTTGGTTTT GCTGACCAAC AAATATGCAT AGTGTCTATT	60
CACAGTTATA CAGTAATAGG TTAGAACAGA AATAAATGCC AGCTTCTTAT GATGCCTTTG	120
CCAACAATCA GGCCATGTGT TTCAGGACCC TTCCTTCCTC TGACTTGTGT AGCATTACAC	180

CTCAGCACAC GACTTCTTGA AAGAGTGAAC CTCCAGGGCT TGCTCTCTCA GATGCACCTG	240
GGCAGCAGCA GGAAGTGTCT GACAGTCTCT CCTGTCTCCA TAAAGTAGCG GGCTGGCTCT	300
TTGCTGGGAG TGATGGGAGC CACAGATACG TGCATGGAAG TTACTGCCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1016:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

GAATTCGGCC TTCATGGCCT AATTATTAAG TAAATAAGG GTTCCTTGAA TATAGGCACT	60
GCAAATACCA TGACAGTGAT CTGATCACTG AGCTAACTAC TGAGTGACTC AGAGGCAGGT	120
GATGTATACT GTGTGGAGTG GAATGGTGAG AGATTTCATC ACACTACTCA GAATTGCATG	180
AAACTTAAAG CTTATAAATT GTTTAATTCT GGAATTTTTC ACTTAATATT TTCTGACTGA	240
GATTGCCCCAC GGGTAACTGA AACTGTGGAA AGCGAACTG CAGATAATGG CGGACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:1017:

- (i), SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 491 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GCGATTGAAT TCTAGACCTG CTCGATCTCA TGGGGCAGAT GAAATTCTCT TCCTTAGAGG	60
AAAGGGAAAG GTGAGGCCCC AGAGGACTTA TCTCAGCTGT ACATGCTCTG CCTGTGGAGA	120
CATGGCTTTT CTTTGTGCTG TGGCAGACTG GGGCTTTGGA AGTGGTGTAT GTTTAACTTA	180
CCTGAGAGTG AGAGATGTGT AGGAAGAATA GCTGGAAGAA AGTGAAAGAT GAGTGCCAGT	240
ACTTTTGGCC TGTATCCAG TAGAGAGAAA GTGACAGTGA AAGTAACGTG AGAGAGAAAG	300
AGTGTGTGTG TATATGTGAG AGAGAGAAAG AAAGAGAAAG GAATGCTTGA TTGCTTGTG	360
TTCACTGGGC CAGCTCTGAA ATCCAAAATC ATGCCTTGAT AACATTACAA AACCGTGATC	420
TTGGGTTTGA GTGAATCCTA GAGACATTGT TCTTATGGCC GCCTGGTTTC CGCAGCATGA	480
TCACCCTCGA G	491

(2) INFORMATION FOR SEQ ID NO:1018:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 323 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GCTTTTCCAT GAAAGGTGGA TCGAGATCTA CTGCCAGTGG GTCAACAGGT TCTAAATTGA	60
AATCAGATGA GTTACAGACC ATCAAGAAAG AATTAACCCA GATCAAACT AAAATTGACT	120
CCTTGCTAGG GCGCCTGGAG AAGATTGAGA AACAGCAGAA GGCGGAGGCA GAAGCTCAGA	180

AGAAGCAATT GGAAGAGAGT CTAGTGCTGA TCCAAGAGGA ATGTGTGTCA GAGATTGCAG	240
ATCACTCTAC AGAGGAGCCT GCTGAAGGAG GGCCAGATGC CGATGGAGAA GAGATGACAG	300
ATGGGATAGA GGTGGACTC GAG	323

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

GGTCACAATC TCCTTGCACT CCAGGACTGG GCATACTCAT ATGCCTTCTG TGGTTGGCGT	60
CCTTGATTTT ACCCAGTTTT GGTTCGTGTT TCCTCTTTCA CACTTCCTGT CATTGGCTTA	120
TACCCCTACC TGTGTCATTG GCCTTAACAA GGACTTAAAG ATGCCGAAAG TTCAGTATAA	180
ATCGAACTGT AAACCATCCA CATTGTCATA TCCTGCCCTT CTGGAAGTAC CAAAAGAAAA	240
AGAAAAGGAA AAGGTTTCTA CTGCTGTATT ATCTATAACT GCCAAGGCTA AAAAGAAGGA	300
AAAAGAAAAG GAACTCGAG	319

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

GCGGGCATGG TGTGTAGCCT ATGGGTGCTG CTCCTGGTGT CTCAGTTCT GGCTCTGGAA	60
GAGGTATTGC TGGACACCAC CGGAGAGACA TCTGAGATTG GCTGGCTCAC CTACCCACCA	120
GGGGGGTGGG ACGAGGTGAG TGTCTGGAC GACCAGCGAC GCCTGACTCG GACCTTTGAG	180
GCATGTCATG TGGCAGGGGC CCCTCCAGGC ACCGGGCAGG ACAATTGGTT GCAGACACAC	240
TTTGTGGAGC GCGCGGGGC CCAGAGGGCG CACATTGAC TCCACTTCTC TGTGCGGGCA	300
TGCTCCAGCC TGGGTGTGAG CGGCGGCACC TGCCGGGAGA CCTTCACCCT TACTACCGT	360
CAGGCTGAGG AGCCCGACAG CCCTGACAGC GTTTCCTCCT GGCACCTCAA ACGCTGGACC	420
AAGGTGGACA CAATTGCAGC AAGACTCGAG	450

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

GAATTCGGCC TTCATGGCCT ACTAGACCTG CTTTTTGGAA GAGAATGCTT TTCACCTGTT	60
CTTTTTTTAA TCCACCTGGC ACTTTCCTCA GGACCCAAAC TTGTTCACTC TGCTGCTTCT	120
TGATGTATCA ATTTTGGGAC ATCACCTGTT GTCTCCTTGC TGTGAATGAT GAGGATTTGG	180

CCCATATTAC CCCCCTTCCT TCCCCGGTCA TTCTCTCGGT TGCCTTTGTC ACTTTAAATC 240
ATTACATAA ACCACAACCTT CTCGAG 266

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAATTCGGCC TTCATGCCTA AGAAACTTAT TCGTCTTCAG CATGAGAATA AGATGTTAAA 60
GCTTAACCAA GAAGGTTTCGG ACAATGAAAA AATAGCCTTA TTGCAGAGCC TTCTAGATGA 120
TGCAAATCTA CGCAAGAATG AACTGGAGAC AGAGAATAGG CTGGTGAATC AAAGACTTCT 180
GGAAGTACAG TCACAAGTTG AAGAATTACA AAAATCTTTA CAGGATCAAG GCTCAAAAGC 240
AGAAGATGCT ATTTCACTCC TTCTAAAAAA GAAGCTTGAA GAACATCTAG AGAAGCTGCA 300
TGAGGCCAAT AATGAACCTAC AGAAGAAGAG AGCCATTATT GAAGATCTCG AG 352

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCGGCC TTCATGGCCT ACAAAGCCA CCAGGTGAAT AAATGCCATT TTCTTTTTCG 60
CTAGACATTG TTCATTTACT GAAATGAAC AAGGTAATGC TCAGCATACA AAAAAAATT 120
AAAGTTCTCA AGATCCCATG CTTTCTGGAT TCCTCTGTAT TTATCACTCA AGTCATCCCC 180
CTTTTGTAA TCTCGCTTTT TGTCTCGCT TTATTAAAT CCTTTATATC ACTACCCCCA 240
TCTCTCGAG 249

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCGGCC TTCATGGCCT ACAGGAAATA GGCAAAAATA CCCAGGAAAA GGAAACAGTT 60
TTATGCATTA GTGCTGTACC TTCTTCATAT TGTCAAAAAT AAAAGATAGT AGAGATTAT 120
TGAAACATT TTAATAAAG AAGTTGTGTT CATAATATAA AGCTGCCTTA AACTATATAT 180
GAAAAAACT GTAAATCATA GAAATAACT TTATCAAAGA TGTAAATAA TACATTTTAC 240
AGAATAATTT CCCATGGGCT TCTCGAG 267

(2) INFORMATION FOR SEQ ID NO:1025:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 232 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

GAATTCGGCC TTCATGGCCT AGCCATCTTA TTGAACTAT ATTTTCCTT CAAAGAAGCA	60
ATAGGTCTCA ACATAGTGTA GGTAGCATCA GGTGACAGAA AGCCAATTTT ATTTTCAAAT	120
TTAAGTTAAT TATCTTCGTG ATCCTATTTA TCCACAATTT CTTTCAGAAA AGACTGAAAA	180
AACACATTAT ATTCAGGAGA TATAATGAAA TTATTGGAAG GCATCACTCG AG	232

(2) INFORMATION FOR SEQ ID NO:1026:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 153 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

GAATTCGGCC TTCATGGCCT AGATTGAATT AGACCTGCCT CGAGCCCCTA AAAATATCCT	60
AAATGCATT CCTCCTCTGC ATTCTAACTA CTGCTGCCCT TGTTCTAGGA CTCCACTCTC	120
CCACATCAAC CAACTTTTCT CCTTGGCCCC CTC	153

(2) INFORMATION FOR SEQ ID NO:1027:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 294 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

GCGAGGGCCA GGGAGGGAGG AAGCAATAAA TAGGGGGAGA AAATGGCAAT AAGACGTTAT	60
ATAGCCCTTC TAACAAAAAT ACCAGAAGGG AGGGGTGAGG GACAAGGCTG TCTGAGGGAG	120
GGCAGGAGGT GAGGCCATGG CTTGGTCTCT TTTGCGCTTG GATGGCCGTC AGCTCAGCAT	180
GAGGCATCTG AAAGAACTAC CCAGATTGCA GAAGAGAGAG GTCCCAGCCT CCTTGAAGG	240
ACATGATGGG GGAGGAGTGG AGACAACAGC TGAGTGTTAC CTGTAAACT CGAG	294

(2) INFORMATION FOR SEQ ID NO:1028:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

GAATTCGGCC	TTCATGGCCT	ACACACATAC	CCAACACACA	CACAGACACA	CACATACACA	60
GAATCAACAC	TCAACACGCA	AACACCCAAC	ACACACATGC	ACACACACTT	TCTGAAGATG	120
AGTTTTCTCA	TTTATGAAAT	GAGCTCATCT	GGACTTGCCA	TGAGGGTCCA	ACAGGTGCCA	180
TGCAATCAGG	TGTGCACTCA	GTATGGGCTG	GGTGGAGATG	GCCATCTCCT	TTCCCGTCCA	240
GGCCTGGTTC	CTGTGTGCTG	GGCCTCTGCT	CTTCCCCCCC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1029:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

GACAAGCTGA	GAAAAATGAAA	GGAAACTAG	AAGAATTGTC	TAATCAGTTA	CATCGCAGTC	60
AAGAGGAGGA	AGGAACACAA	AGAAAGGCCT	TGGAAGCCCA	AAATGAAATA	CATACCAAG	120
AGAAGGAGAA	GCTGATTGAT	AAGATTCAAG	AAATGCAGGA	GGCCAGTGAC	CACTTGAAGA	180
AACAATTGA	AACTGAAAGT	GAAGTCAAGT	GTAACCTCCG	GCAGGAAGCA	TCCCGGCTCA	240
CTTTGGAAAA	CAGGGAATC	GAG				263

(2) INFORMATION FOR SEQ ID NO:1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

GAATTCGGCC	TTCATGGCCT	ACCTCCTACA	AATTTAATTT	TTTTATGAAA	TTTTTAGGTG	60
ACTTGTAAT	TCTTCATGTA	TGAGGAGTTG	TGTTTATTAA	TGCTACTTTT	TAAATTTTCC	120
TGTGCCATGT	GGCAGATGTT	TATTCTCTTA	ATGCACTTCA	GGTTTGCTAT	CTGTAAAGCC	180
TTTGACCCAG	GCCTACTGAG	TCAAATCTAC	ATTCACTGTA	ACATTAAAGG	CAGAAACCTC	240
GAG						243

(2) INFORMATION FOR SEQ ID NO:1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

AATTCGGCCT	TCATGGCCTA	ATTGAATTCT	AGACCTGCCT	CGAGATTACA	GCCAGAGTCT	60
CCTAACTGCT	CTCCATCTAT	TCTCTAATCC	CAATAGCTAC	TCTCCATGCA	GCTGTCAGAG	120

TGGGCCTTAT AAAACATTGG TCAGGTCATG CCAGGCCTCC GATGGCTCCC ATCACACTCA 180
GGGTAAGAGC CGAAGCCCCA TGTGGGTGTC TAAGGCCCCG TGTGATCCTT ACCCACTTCT 240
CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1032:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 114 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

GAATTACAC CTGCCTCGAG TACTCCCATG CCACTTTCAG CACAAATATC ACTTATTATG 60
TGCTGCTTGA ATATTATTTT CTTTATTCTT AAGTTTGGTC CATTGAGTCT CGAG 114

(2) INFORMATION FOR SEQ ID NO:1033:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTGTTGT TCTTTTCTTT TCCATGATAT CATTATATGG ACAGTTTAGG GTGGTCTCAT 60
GGATTATAAC CATTGGGATA TTTGGTTCAC TAACAATTTT CTTACTGGCC AGAGTTCTTG 120
GTGGAGAAGT TGCATATGGC CAAGTCCTTG GAGTTATAGG ATATTCATTA CTTCTCTCA 180
TTGTAATAGC CCCTGTACTT TTGGTGGTTG GATCATTGGA AGTGGTGTCT ACACTTATAA 240
AACTGTTTGG TGTGTTTTGG GCTGCCTACA GTGCTGCTTC ATTGTTAGTG GGAGATCTCG 300
AG 302

(2) INFORMATION FOR SEQ ID NO:1034:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGTC TTCATGGCCT ACCTGAGCAC TCTGCATTTT AATTCTGTGT TCTTCCCTT 60
TATCTATGTG TTGTCTCTGA GGAAATGTCC TTTAATGTCT TCCTCAGGCT TGATACCTAA 120
TTTGAGATGG TTCAAACAAT TTTTCCCTTT TCCCTTCACT GGAAGCTTTG TTACTCATTC 180
TGTTTGCTTT CATACTTTCA AATGCTGTCT TTTTATTTT GGTGGTATTT TTTTCTCTT 240
TCTCAGGTGT AACATACCTC GG 262

(2) INFORMATION FOR SEQ ID NO:1035:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

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GAATTCGGCC TTCATGGCCT ACCTACTAGG CATGTTTTAT GACACAGATG ATGCGAGTTT      60
CAAGTGGTTT GATAATTCAA ATATGACATT TGATAAGTGG ACAGACCAAG ATGATGATGA      120
GGATTAGTTT GACACCTGTG CTTTCTGCA CATCAAGACA GGTGAATGGA AAAAAGGAAA      180
TTGTGAAGTT TCTTCTGTGG AAGGAACACT ATGCAAAACA GCTATCCCAT ACAAAGGAA      240
ATATTATCA GATAACCACA TTTAATATC AGCATTGGTG ATTGCTAGCA CGGTAATTTT      300
GACAGTTTGG GGAGCAATCA TTTGGTTCCT GTACAAAAAA CATTCTGATT CTCGTTTCAC      360
CACAGTTTTT TCAACGCAA CCCTCGAG      388
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(2) INFORMATION FOR SEQ ID NO:1036:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

```
GAATTCGGCC TTCATGGCCT ACTTTTGTAGT AAAGAGCAAA CTCATAAATT TTGGCATCAG      60
AGTTTGAGCT TTATTTTCT TAAATGAGTT TGAAATCAAT TTAATATTTC TCTCCAATTC      120
CCTAATGTCT CAGAAGTGAA TTTACAGTAT ACCTTTGTTT TTTCGTATTC TTAAGTAGTA      180
TTTGGATTTT ATTTAGTAGT TGCAGTACTA AATAAGGAGT GGGGAGTTAA TTACAAAACG      240
AATCAGGTGA CTCTCGAG      258
```

(2) INFORMATION FOR SEQ ID NO:1037:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 85 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

```
GCGATTGAAT TCTAGACCTG CCTCGAGTGA TTTGGCCTGC ATGGTTTTCC TCCTACCCCT      60
TTTTCTTTGC CTGGGTCAGC TCGAG      85
```

(2) INFORMATION FOR SEQ ID NO:1038:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

GCGATTGAAT TCTAGACCTG CCTCGAGGGG TTTGGAGCTC TGTGGGTGG TGACCTCAGT	60
CCTGTTTACC CCTGCAGAAG AAGGACCCAG CCCAGTTCCT GCAGGTACAT GGCCGAGCTT	120
GCAAGGTGCA CCTGGATTCT GCAGTCGCCC TGGCCGCTGA GAGCCCTGTT AATATGATGC	180
CCTGGCAGGG GGACACCAAC AACATGATTG ACCGATTCTGA TGTCCTGCT TAGGCCATGA	240
AGGTCGAG	248

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

GAATTCGGCC TTCATGGCCT AGTCACTTAA ATAGATTG TGTGAAATTT TATGATAAAA	60
GGTGACTTTT GTTCTAGTAA GTATTCTCAA AGAAAAGAGA GTGAGTAGCT ATTTTGGGAT	120
GAAGATAGTT ATAAC TGAGA TAGCGGTTT TGTTTTGT TTTGTTTTT GGCCGAGCG	180
GAGTGCTGTG GTGCGGTCAT GGCTCACTGT AACCTCAGCC TGGGGTCAAG GTCTGCCCAT	240
CTCAACCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

GAATTCGGCC TTCATGGCCT AGTTCAAAA TAAAGCAAAT ATTTATTTTG GTATTGTTTT	60
GAGCAGAGCT GATTTTAAAC ATTTCTTTC ATAACACTCA GAAATCATTA ACAATTGTTT	120
GCTCATTG TATGGGTTTT TTGTTCTCTT TTTTTTTTG GGTCTTTTA GGTGCTTTCT	180
TTTAACATTG GTCATGTTT ACCCTTTTT TTTTCATCCC CCCAGTCTCG AG	232

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCGGCC TTCATGGCCT ACAAGGACGT TAAAGGCATT TTATTCCAGC GTCTTCTAGA	60
GAGCTTAGTG TATACAGATG AGGGGTGTCG CTGCTGCTT CCTTCGGAAT CCAGTGCTTC	120
CACAGAGATT AGCCTGTAGC TTATATTGA CATTCTTCAC TGTCTGTTGT TTACCTACCG	180

TAGCTTTTTA CCGTTCACCTT CCCCTTCCAA CTATGTCCAG ATGTGCAGGC TCCTCCTCTC	240
TGGACTTTCT CCAAAGGCAC TGGACCCTCG AG	272

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAATTCGGCC TTCAGGGCCT AGATTAAATC TCAAGGTGGA CTAGGAGAGA ACAAGCAGAC	60
TTCTATAGAA CAGTGTCTTC CTTTGGTGTG GTTTACGATC AAGAAAAGAA AACCTTTGAC	120
TGGACACAGT TCCGCATCAT TTCCCGTTTG GACAAGAAGT CGGATGAGAG CCTGGAACAG	180
TATTTTATA GTTTTGTGGC CATGTGCCGG AATGTCTGTC GTCTACCCAC ATGGAAAGAT	240
GGCGGTCCCC CAGATACCAC CATCTACGTT GAACCCATTA CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GAATTCGGCC TTCATGGCCT AGTGTAATCT TATTGGGAAC CTAAACTGC TCTTAAAGTC	60
TTTTTGAAAA CTCAGACATA TTTTGGCAT TACCTTTTTT TTATTGGAAA GGAAAAATGA	120
AAACCTTTCA TTTTATTAAT AATTCTATAT TCCACTCCTG TATTTTCTTC TCTTGGATGA	180
TGATGGTGAT ATTATTTCTC ACTTTTCAAA ATAATACCCT GGGACTCGAG	230

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

GATTCGGCCT TCATGGCCTA GGGAAAATAA AAATGTATTC AGTAGCACGT GGGTTATGGT	60
TTCTCATAGA CCAGGGGATA AGATTAAAAG TCACTGAAGA GTGGGAAAAT GCATGTTGAG	120
AAGATGAGAA TGGCCTGTAT TTTCTCCAGG GGAATCTGTG TAATGTGCCT TTTCCCTCTC	180
CAAATGCCTA GAACCATGGC ACTGTGTCTT ATTTATTTAA CCGTTGGGCC GTCTCGAG	238

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

TAATTCATCT AAGTTGTTGA ATTAGCATAA AGTTTTTAAT AAAATTTTAT GTAATTCCTT	60
TTTAGAGAAC TAACTTTTGA AATTGCTGAT TTTCTGTTTT CCGTTTCAAC ATTTTACACA	120
CTGGTAGTTA ATAGTTTTTT CTCTCCAGCT TACTTCGTGT TTGATTACT TTTCTTTTC	180
TGTCTTCTTG AGGTGGAAGC TTAGAGGATT AATGATTCCA TTTCTTTCTA ACGAAATCAC	240
TTAAAACTAT AAATTTCACT CCAACTACTT CTTTAGCTAA ATTCCATAAA TTTTACTATG	300
TTGTGTTTCC CTTTTCCTACT CCGTCTCCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 429 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

GAATTCCTAGA CCTGCCATTG TGGGGAGTGG AAGTGGCATG ACCTCAGGAG CCAGTTCCTGA	60
GTCCAGGTGA ACCAAAGCTC AGTTTCTTTC ATCTTTGAAC CTGAACCTCT TACCTCCAAG	120
AAAAAGGGCC CAGGAATTTG GGCCTTCTTG TTTATTTGTC CTCTGCCCC TCTCCCTATC	180
TAACCCCTGG GTAAGGGTGA GCTTGAAGGT GATGGTGACA GTGGCTTCTG TGTGTGTCAG	240
TCCACCCTCC AAGCAATGCT TAGAAACCAG TCCATAAGCC AATTAAACACA TCATTTTATG	300
GGCAGATTTG CAAGTTCTCA GTTGTTTACA TGTTTCGTTA AGTACTAACC TCCAAATTAA	360
TAAAGCATGA CACATGACAT CACACATTTC ACAATTTGTA CCCAAGCAAA GTTCATGGAG	420
GTACTCGAG	429

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 65 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

GCTTGGTAGA CCACATCCAA GGGACGATGA GTTTCCCAG AGGAGGAGTG GTCACCATGA	60
TCGAG	65

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 498 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

```
GAATTCGGCC AAAGAGGCCT AAATTTGGTT TAATGTGTCA TCAAACCTTG TATTCAGCTA    60
TCTAGAGCCA TTTTCTGGAT TCATGCAATA CATTTTCCCC AAACCCTTTT TATTTTGAAA    120
AAGCTCAAAC ACAGAAAAGT TGAAAGAATA GCGTAAAGAA CATCTGGATG TGGTGCAGGG    180
TCTCATGTTT ATAATCCCAG CACTTCGGAA GGATTATTTC AGACCAACCT GGGCAACATA    240
GTAAGACCCA ATGTCTACAA AAATGTTTAC GGATAAACCA GGCGTGGTGG TGAGGTAGTC    300
CCAGTACTC AGGAGGCTGA GGTGGGAGGA TTGCTTGAGC CCAGGAGTTC AAGGCTGTAG    360
TGAGCAATAA TCACATCACT GCATTCCAGC CTTGAGTAAC AGTGAGACCT GTCTCAAAAA    420
AAAAAAAAA AACACCAAAA ACAACCAACT GTGTATATCT TGCCTGATA ATCCCCCGAA    480
TTCTAGACCT GCCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

```
GAATTCGGCC AAAGAGGCCT AAGCTGAGAT GGGTGTAAAA AGTTAAGACA CAGCTTAAGA    60
CAGAAGCATT GTAAAACAGG AACAAATACT GGCTTAAACC TGATGTCTCT AACTATATTC    120
CTCTATTTTA AGAATGTTT AGTATCTGAT AGTTTCATCA GCCTTTCCAT TTCCAATAT    180
GTGACCTTTA TTCCACCAT GTCCCAAATA AACGAGTCCT AGGATTTCCT AGAAGGTGGA    240
CCTCAATTAT TGTGTCCCTT TTATATATAA GGCAAACATT GCTTTTAAGT TCTGTTGGAA    300
CATGGGAAGT TTCACTAGAA TGCTTAGAAT GTTCAGAAAA AATGTCCCAA AGCTCTCTTC    360
TGGTCCATAC AAGACAATCA GAATGTAACA CAGTAGCAGA GGGTGTGGAA CATACACTAG    420
TCATATTTGA TTCTCTCTGT CAG
```

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 68 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

```
GAATTCGGCT AAAGAGGCCT ACTTCTGGCT ATTTTCAAAT ATATAATATG TTATTGTAA    60
CTATACTC
```

(2) INFORMATION FOR SEQ ID NO:1051:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGCAA      60
GACTCTGTCT CCAAAAAAAAA AAAAATTAA AAAAAAAAAA ATTTTAA AAATTTTANT      120
TAANGTAAAT TAAAAATGT TCAGTGAAAT GGTAAAAAAA AAAAAAGAC GCACAAAATA      180
CCTTCATGTT TCTCATCTCT TTTCCCTTC AGATTCTGCC TTTCTTCAA TTCAGCTCTT      240
CTTTTCCAGT CTTTCAACCA ACCACCACGA CTCTCGAG      278

```

(2) INFORMATION FOR SEQ ID NO:1052:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

```

CTCGAGGACC AAGGATGAAG AGCATAAGAA GATGAAGATT GTAAACTTGT ATAAAATTAT      60
CTTGGTGAGA AGACAAATTG TAAAGTAGAT ATTTGTAATC TTTTACCACT TTGGGGTTGC      120
TTTTTTCCCG GAATTCATCA GAACTTTGAA TTTTTTTTTT AAATGGGCTG TTTTAAATGC      180
AGGGGCTTTT CTTCCCTAGA AACCCAATTC TAAGCAGAAA AAGNAAAAAN ACACCAAAAA      240
TAAAAAACCC CCCTCGTGCC GAATNTNGG CTTCGGGGGC CAAATTCGGC CCTCTTTGGC      300
CGAATTC      307

```

(2) INFORMATION FOR SEQ ID NO:1053:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 332 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGCAG      60
TTAAGATCTG GGTGATTCTT TAGGGAAACG GCTGGTTGAG AGGCTTTGAT GGAATCCCAT      120
TCTCTGCTGT GGCCAGAAGG TGGTGCTAGA GGCCAGTCCC ACTTGATGT GACCTTGGCC      180
TCTGCCAGGA TTCAAACAC AAAGAACATT TGGAAGTGGG ATGTTTGCTT TGAAGCAGCC      240
TGAAAACAAG TGAAAAGGAA ACCAAGATAA CTCTCTCTCC CTCCGCTGGC AAGGATCAAA      300
AATACCTTGT GCAGGAAGC CCGAGCCTCG AG      332

```

(2) INFORMATION FOR SEQ ID NO:1054:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 389 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

```

GAATTCGGCC AAAGAGGCCG GAATTCGGCC TCGAAGCCAA GAATTCGGCA CGAGGCCTCG      60
TGCCGCGCCG TTTTTTTTTT TTTTTTTCAC AGGGGGGCGAG TCGGGATTAT AATACACTGT      120
AGCAGTTGGC TGGGGAAAAG TCTATCAAAT TCCATGACCA ATTGGACTTT TCTCCCACCT      180
GTAATATAAA TAAAATATGT ACTGTTTCAT ACTGAATTTT TTCAATGCAT TGGGGTTCAA      240
CATAAAAGGC ACAAATAAAT AAAAATATCA TTAAATAAAC GGAAATTACA ATTTCAAGTT      300
TCATGTGGAG TTGTATCTCA CTGTTTGTTT ACTTTTTCCT ATTTAATTG ACAGACTTAG      360
TAATAGCACA CAACTGTCCT ACCCTCGAG      389

```

(2) INFORMATION FOR SEQ ID NO:1055:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

```

GAATTCGGCT AAAGGGTCTA CGAGGTCAGC AAGGACGCCC AAGGAGACTC AGTCATGAAA      60
GGTGAAGTGC TCCTGTTTTT CAGTGTGATT GTCCTGCTCC AGGTGGTATG CAGCTGCCCG      120
GACAAGTGTT ACTGTCAGTC ATCTACAAAT TTTGTAGACT GCAGCCAGCA GGGTCTGGCC      180
GAAATCCTT CCCATTCCCC TCCGTCGCTC GAG      213

```

(2) INFORMATION FOR SEQ ID NO:1056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 173 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

```

GAATTCGGCC TTCATGGCCT AGCGATTCCA GGTTTTAAAT AGTTTGTAAG TTTTCAGTTT      60
CTACACACTT TATCATCCAC TCGTGATTTT TTAATTAAAG CGTTTAAATT CCTTCTCTG      120
TTCAGCTGTT GATGCTGAGA TCCATATTTA GTTTTATAAG CTTCCCCCTC GAG      173

```

(2) INFORMATION FOR SEQ ID NO:1057:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

```

GGTCATACTC TCTCATCCAG ACTGGAGTGC ATGGAGTGCA GTGGCACCAT CTCGGCTCAC      60
TGCAACCCCT GCCTCCCAGG TTAAGCAAT TCCCCTGCCT CAGCCTCCCG AGTAGCTGAG      120
ATTACAGGCA CATGCCACCA TGCTGGCTA ATTTTGTAT TTTTAGTAGA GACGGGGTTT      180
CACCATGTTG GCCAGGCTGG TCTCGAAGTC CTGACCTCAA GTGATCTGCT CACCTCAGCC      240
TCCCAAAGTG CTGGGATCAC AGGTGTGAGC CACTGCACCC GGCCTAGTTT CCATTTTCT      300
GTTGATATTT ACTTCTATTC ACTCATTAAG ACTATATTTT ATTTCTTTAA TATATTTTCC      360

```

CTTAGTTCTT TGAACATATT TATAAGAGCT ATTTTAAAGT ATTTGTCAGT TGAATCTAAC	420
ATCTTTTGGG GCCATTTTCT ATTGACTGCT TTTTCTTGA TGATGAGTCG CATTTTCCTT	480
TTTGCCATATC TAGTAATTTT TAAATTATAT ACTGTACCTT GTGGATGTAT GGTAGAGACT	540
CTGGGGTCTC TCGAG	555

(2) INFORMATION FOR SEQ ID NO:1058:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC TTCATGGCCT AGAATGTTAG AAGGTGCCTG CCGAGGCGGG ACAGAGTGTT	60
CGCTCGCGCT GGAGAAGGCT CTGCTCAGCC CTGAGAGTCC CTTCTGCCCC CACCGATACT	120
GGCACTTTAA CAAGGAAGCT GACCGCACAG TGTCCAGACG AATTGGCCCC CAGAAGATGG	180
GGAGTTCTGT CCGCCCTTC TGTGTCTGCG TGACCTCACC CAGCCTAGGA GGGAGGTGCA	240
TTCAGGGTAG ATTTGCCTCT CATTCAAAGT TCTGGGGCTT TGGGTGGAAA ACAGCCAGCT	300
TTGGCGCTGC TGGGAGACT CGAG	324

(2) INFORMATION FOR SEQ ID NO:1059:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAATTCGGCC TTCATGGCCT ACTTGATGCT GCAAAGAACA AGATGCGAGT GAAGATCAGC	60
TATCTAATGA TTGCCCTGAC GGTGGTAGGA TGCACTTCA TGGTTATGA GGGCAAGAAG	120
GCTGCCCCAA GACACGAGAC TTTAACAAGC TTGAACCTAG AAAAGAAAGC TCGTCTGAAA	180
GAGGAAGCAG CTATGAAGGC CAAACAGAG CAGCTCGAG	219

(2) INFORMATION FOR SEQ ID NO:1060:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGGC CTTATGGCC TAGTATTTAT AGCCAAGGAA ACAGGGCTAT GAGTTTGTAC	60
TGTAGGCAGC AGTAGGGAGG GGAATTGGA AGCAGGGGGG AGGGCTCTGC AGTAGTTCAG	120
TTGATGCATA CATAAGGCCT GAATTAGGGA ATTAGGAGAG TGATCATAGG TGTGGAAGG	180
AGGGGAGGGC TTCCAGGCAC ATTTGGTGTAA AAATGGATAC AACTTGGTAA CCTGTACATT	240
GCTACCTTTG CACATTGGT TTCCCTGTC TCAAAGGCTC CCTCTTCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:1061:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

```

GAATTCGGCC TTCATGGCCT AAAGAAAACA AACAAACAAA GAGAAAACCC ATGAGCATTT      60
TAATTCGTGAC TTTTCTACTT TTCTCCCTAC ATTTAGAATA CTGTGGCACT TTCTGTTATC     120
CAAATGTGTC TCAGTCTCCA TATTTAAGGA CTGTGGGTGA AAAGCTTCTA CCTGGAATTG     180
AAGTGCTTTG GACAGGTCCC AAAGTTGTTT CTAAGAGAAAT TCCAGTAGAG TCCATCGAAG     240
AGGTTTCTAA GATTATTAAG AGAGCTCCAG TAATCTGGGA TAACATTCAT GCTAATGATT     300
ATGATCAGAA GAGACTGTTT CTGGGCCCGT ACAAAGGAAG ATCCACAGAA CTCATCCCAC     360
GGTAAAAGG AGTCCTCACT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1062:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

```

GAATTCGGCC TTCATGGCCT ACATGAAGCT GAATTACTCT CATCTTATAT CTCTCTGCAG      60
TGGCATATCC TGATGGTGAT TTCCTCTTTT TGTGCCTCAG TTCACCCCTA TATGGAATGG     120
GGATAAACAC TTGCGGCTGG GCATGGTGGC ATGTGCCTGT AGTCCCAGCA CTTTGGGAGG     180
CTGAAGTGGG AAGATTGCTT GAGGCCAGGA ATTTGAGACC AGCCTGGGCA ACATAGTGAG     240
ACACTCTCTC TACAAAAAAA AAAAAAGAAA AAAAAATCAG ATGTGGTTGG TGCATGCTAC     300
TGAGGCGAAA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1063:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

```

GAATTCGGCC TTCATGGCCT ACTAGACCTG CCAAGCTTTC TTCCTTCATA CTACATATTT      60
CACAAAATTT GCTCGTCAGG TCTGCAAAAA TACCCTCCGG CTGCGGCAGG CAGCAAGACG     120
GCCGTTTGTT GCTATTAATT ATGCTGCCAT TAGGGCAGAA TGTAAGATGC TTTTAAATTC     180
TTAACCTTAT ATGTTGTGCT TCTGACCATT TTCTCTTTTC CTCTCTTTCC TTTTCTTTT     240
GTTTGTGTTG TTGCAATAAA CATAAGTTCT TGTGTACAGC CCACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1064:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

GAATTCGGCC	TTCATGGCCT	ACAGAGCTGA	GAAATAATTC	CCTTGTGTGT	TTATAAGTAA	60
GAGTTAAATC	CCTCCCATG	TAATGTAGCA	CCAGATCGAA	GTAAACAGAC	TATGATTTC	120
GTGCTAGACA	CAGCCTTAAG	GCAGAAGAAA	TTACACTGTC	ATGCAAAGGA	TATGTAGCTG	180
CTGCTATTTT	GGTGCTTGAA	TTCTTCGTTG	TCACATAGTT	GAAGGCAATC	CAGATGAGGA	240
AGAGTGTTAA	CCAACAAAA	GAGAAAATTC	CCTGCACATG	GTCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

GAATTCGGCT	TTCATGGCCT	ACTGGGAGCT	ATCTTGCTCTA	CCTTGAGGTT	CCTGAACAAT	60
GAATTCCCAT	TAATGAGCAG	TCTTCAGTAT	TAAAACCACT	GTCTTGTCAC	CTCATTTTGC	120
ATTACTGTCT	TCCGTGGATG	TTTCAGTTAC	AACTGTAATG	TTATTTATAG	AACAACATTA	180
ATCCATTAAA	GCTAACCTAT	TTTTCAATAT	TTATGATAAT	CTATGTACAT	ATATTGTCTG	240
TCCATATGTA	TTTGTAATA	GGTTGTATAT	AATGTCAGGT	TTGGGTCTTG	GGTTCAAGTG	300
TATATATTC	TGTAAGTTTC	TTAACTGCAT	TTTGATGAAT	TCACATTATG	TAACATAAAG	360
AATTGTCCCA	AAAGTACCTG	TACAGAAAAT	TGAATATTGA	AAAATTGACA	AATTGTGTAC	420
AAACACTAAA	AAAAACTTGT	TTAAATTGTA	TTTGCAATAA	ACAACATCAA	ATTTTTCAT	480
GAAATCTGCC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

GAATTCGGCC	TTCATGGCCT	AAAGATTATA	AAGGAAAGGG	GGGTAGTTAA	GATTTAGAAT	60
TCAAGTTAAA	TTTCAGAAAT	TGGGGCAGTC	AGGCATTGTG	ATCTTTTAGG	GCAACAAGTA	120
AAACATGTAG	AGTGCTTGCT	ATCCCACTTC	ATAAAGCTTT	TACCCAATCT	TATTTCTAAA	180
CCTCTGTGCA	TTCTTAGTGT	CTTCTCATTC	TGAAACAGAA	AATAAGGAAA	AACATTTAAC	240
TTAGTTTTCT	AAAATCAGAT	AATCCTAAAC	AAAAATGTTA	GTCAGGGTCA	CTAAAAAGTA	300
TTGCACATTT	ATATAAATAC	AGTCCTTTTA	AAATTTGACT	TTTAAAAAAC	AAAAGACTTT	360
GTACGATATT	GTGTTTTTAT	TGCGTTTGCA	ATATTTTAT	AGTAGCCTTT	ATGAACCTCAG	420
TATAAGTGCA	AGTTGTTTGA	AAAGGTGTTT	TTATTAGTGC	ACAATAGAAT	TGTGAGGTTT	480
TCAATAGATG	TCATGAGATT	CCTCGAG				507

(2) INFORMATION FOR SEQ ID NO:1067:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 393 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

```
GAATTCGGCC TTCATGGCCT ACTTATTTTT TTCTTTTAAA CAAATAAGCA CACATTCTTT      60
TTAAATAAAG TTTCTCTTCC CCAACCTAAA AGTAGTAATG CTAGAATTG AGCATAGCAG      120
AAAAATATTT AGGAAAATTA AATCCCAAAC AAGAGAGACC ATCTTGGACT GTGCTCACTC      180
GGGTGGAAAG TCGACCCAGG TGCCTGTGTG CTTGACAGAG GCGTGGCTGC ATCCGCGTAG      240
CTGACCTTCA GATGGACTGG AGTTAGCACA TTTGTAGTCA TTTTCCAAC CATTCTTTCG      300
TATCTGAGGT ACGTTTTTGA CCTGTTT TAGTGTCACTC GCGATCTTGA AGCACACTCT      360
TTCATTACT TAAATATTTT CTGAGCACTC GAG                                     393
```

(2) INFORMATION FOR SEQ ID NO:1068:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

```
GAATTCGGCC TTCATGGCCT AAGGTAATGT GTCAGTGGAT GGAAAAGTT AGAAAAGATC      60
TGTGTAGGTT CTGGAGCAAC GTTTTCCAG TATTCTTTCA GTTTTGAAC ATCATGGTGG      120
TTGGAATTAC AGGAGCAGCT GTGGTAATAA CCATCTTAAA GGTGTTTTTC CCAGTTTCTG      180
AATACAAAGG AATTCTTCAG TTGGATAAAG TGGACGTCAT ACCTGTGACA GCTATCAACT      240
TATATCCAGA TGGTCCAGAG AAAAGAGCTG AAAACCTTGA TACTCTCGAG                290
```

(2) INFORMATION FOR SEQ ID NO:1069:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

```
GAATTCGGCC TTCATGGCCT ACTCGACTCA TATTTTATC ATACATTTC AAGTCAGTGT      60
CTGATGTAA TCCCATTTCA ATGTGGGGCA GACTCTCGGG GTAATTTCAA AAAGATGTCT      120
CAAACATGTT TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG      180
TGTGGAGACA GGGTCTCACT CTATTGCCCA GGCTGGAGTG CAGTGGTGCC ATCATGGCTC      240
ACTGCAGTCT CGACCTCCCA GACTTAAGCA ATCCTTCCCA AATAGCTGGG ACTCCAGGGG      300
CACCCCACTA CAACTCGAG                                     319
```

(2) INFORMATION FOR SEQ ID NO:1070:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

```

GAATTCGGCC TTCATGGCCT ACTTCTAAAT GGCAAACAGT TGTCTTGAAG GCACTGTCTT      60
TTTCTACCTA GATGTTGGGT GGAAAAAAGC AAAAAAAGC TGCCTTTTAT ATAGAAGTTC      120
TTGGGAATAT TTCTCATATA GTGAGATGAA CAGAATGCAA AAGTTTCTT CCTGCAGGAT      180
CTCCCAAAT CCTTCTTGGC TTGAATTTT CTTCTCACTT TTCTTTTGA AAAGCTTTGT      240
TCCTTTTGCA CCTTGGAAAA ATAAGTCTTG TTTGTCCTGA CAGCAGAGTG CAAGCATCTA      300
TTGCATCAA ATTCCCAAGT GGAATAGAAA ACCAATGGTC CTTTCTGAA TTCGTTAGC      360
AGTAGCAACA AACATTTTCAT TATAACCTCG AG                                     392

```

(2) INFORMATION FOR SEQ ID NO:1071:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```

GAATTCGGCC TTCATGGCCT ACACAATGGG AATCCAAGGA GGGTCTGTCC TGTTCGGGCT      60
GCTGCTCGTC CTGGCTGTCT TCTGCCATTC AGGTCATAGC CTGCAGTGCT ACAACTGTCC      120
TAACCCAACCT GCTGACTGCA AAACAGCCGT CAATGTTC AAGTGTGAGC ATGCGTGTCT      180
CATTACCAA GCTGGGTTAC AAGTGTATAA CAAGTGTGAGC AAGTTTGAGC ATGCAATTT      240
CAACGACGTC ACAACCCGCT TGAGGGAAAA TGAGCTAACG TACTACTGCT GCAAGAAGGA      300
CCTGTGTAAC TTTAACGAAC AGCTTGAAAA TGGTGGGACA TCCTTATCAG AGAAAACAGT      360
TCTTCTGCTG GTGACTCCAT TTCTGGCAGC AGCCTGGAGC CTTTCATCCCT ATACGCTCGA      420
G                                                                                   421

```

(2) INFORMATION FOR SEQ ID NO:1072:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```

GAATTCGGCC TTCATGGCCT AATCGGTCAC TGATAGTATG TATTTCTTTA GTAAGAATGT      60
GTTAAAATTA CAATGATCTT TTA AAAAGAT GATGCAGTTC TGTATTTATT GTGCTGTGTC      120
TGGTCTTAAG TGGAGCCAAT TAAACAAGTT TCATATGTAT TTTTCCAGTG TTGAATCTCA      180
CACACTGTAC TTTGAAAATT TCCTTCCATC CTGAATAACG AATAGAAGAG GCCATATATA      240
TTGCCTCCTT ATCCTTGAGA TTTCACTACC TTTATGTTAA AAGTTGTGTA TAATTGTTAA      300
AATCTGTGAA AGAATAAAAA GTGGATCCCC TCGAG                                     335

```

(2) INFORMATION FOR SEQ ID NO:1073:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

```

GAATTCGGCC TTCATGGCCT AAAAAATAG GCACAGTTTC AGATGCTTCA GCATATGAGG      60
CATGGATACT TCAATCATT GCAAAGGTT CTGCTCAGTA GACTGAATGG AAAAGATGGT      120
CATTGCTCTT TAATGTAATT TTGCAGCTCT CATCAAAGAA AATATCTCCA TGAAATTTAT      180
TGGTAACTGT TTATCTTTGA TCAGTGCAAA CTGAAGTCAA ATATACAAGG TAAACACACA      240
TAAAGATAAG TTCACACATT TCTGTGAATT TTCTAAATGT ACACACTTCT GCAAATCTCT      300
TAAATTCACA AATAACAAAT TTGCATGCAT GCAAGCATAT GTGCACATGT GCACACCTCG      360
AG

```

(2) INFORMATION FOR SEQ ID NO:1074:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 612 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

```

GAATTCGGCC TTCATGGCCT ACCCAGGTGA TCAATGTTT CAATGCGATC AGTAATAACC      60
ATGTGCTCAT GAATCAGATA GGACTGAGGC AAATAGGTT CAGCCTTGAT GTTAATAAGT      120
AACTCCAGTA GGTTCCTGGG TGGCATAACA ATGGAAGTGT TCAGAGGGAT CACATAGCAC      180
TTATCCAGGT TAAGATCTAA ATAGGCTGTA AGTTTCTTGT TAAAGTCATG AACAATGTTG      240
GCAGGATCAC TATCTGCAAA CTCTGGGACA GGCACACTGA TAAATTC AAC      300
CAAGATTTT AATATTTTCT TCAATTGTCT GGTAGAGAGC AGCTGGGGCA TCTGCAGAGG      360
GCTCATTTAA GATGACATCA TCTTTGATGT ACTTTATTCC ACAGTAGTAC ACGTCATCTG      420
GTTGAAGTGC AAAATATTTG TACAAGTATG CTCCTCCTAG AATAACACCT GCAAGCATAA      480
ATGCTAGTCC AAAGCACATG CACCACCACC ACCCGGCTAA TTTTGTACT TTAGTAGAG      540
ATGAGATTTC ACCCTGTTGG CCAAGATGGT CTTGAACCTC TGACCTCAAG TGATCCGCCC      600
ACACCACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1075:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

```

GAATTCGGCC TTCATGGCCT AAGTTTGTGG TCCTCTGAGA ATTCTCTGAA GGAGGAAATG      60
GGTTGACCTA TTTGGTTGCT ATGAAGTAAA AACAACTCTG TTTTCATTTT TTAGTGAACA      120
TCTGGGTTGC ATTTATTATT TCACATTCTG GAGATTCTGT AAAACCACAA TTTGATAATA      180
TGAGGGTTCA TCAAAGCGGT AATTATTGAG CTATTTTAT AGTTGATTCA AGAATTAGGG      240
TGGCGACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1076:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 151 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```
GAATTCTAGA CCTGCCTCGA GTGTGATACC AGCAGCTATG AAGCAAAC TG TATTAACCAA    60
GTCTTTTATT TTCTGTGTTT TGATGCATGA CTTTCATGGC CTTGTCAACC CTAGAGACCC    120
TGCCCTCC ATAGCTAGCG AACGTCTCGA G                                151
```

(2) INFORMATION FOR SEQ ID NO:1077:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 542 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

```
GAATTCGGCC TTCATGGCCT AGGAAGTAGT CTAATAAATT AACAGTTATG GTTTTAATAG    60
GATCTGAAAG ACAATCTTTA AAGAAATGGG AGAAATTGGG GGTATCAGTG AACCTATACC    120
AACCTCTCTT TGTACATAAA TATGGTGATG TAGCTAGATA TAAAAATCAG TGTCTTACTG    180
GCACCATTTA CAGTTTAGAA AACAATCTTT TTCTTAAAAA TGCCCATCTG ATTTCTATTT    240
TTAGGAGCTA CTTGGATTG TATGTATTTT TTCTACGTGA AAATATATGT ACTCTTCACT    300
TTTGTTCAG TACTATAATT GCTCATGCAC TCTTCTCCC CTTTGAGAAC ATTCAGTGAA    360
ATACAACTTC ATCAAAGATT TGCTCAAAGG AGAAGAATCG CATGAGTGTG AAAAGTAGAT    420
GCTCGTAGCC AGAACAGAAA AGGTTACACA TGATCATGGC ACAGAAGATA GGAGGTTTGA    480
CTTGGTGGGC CATAATGTTT ATTATCCTTT TTGAAATAAC AGGGACCAGC AGCACTCTCG    540
AG                                542
```

(2) INFORMATION FOR SEQ ID NO:1078:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 574 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

```
GAATTCGGCC TTCATGGCCT AGGTTGCCAT TACTTGTGAT GCCTCTGAAT GTGGAGGCTG    60
ACTCTCCCGT CTCTCTGTCC CTCCTACCCC ACGGGGCCGC AGCAAAGGCC ATCTGGGGCC    120
TTCGACTGGG CCATGTCTTC AGGAAGATTC CTGAAGAGGA GGGCCCGAAA TACCTGCCCTT    180
TATAGGTTCC CAGAGTGCCC TAGAACATTC TTAGATACAT ATTTTATAA CAAGTAGGAC    240
TCCACCTTAT TTTCTCAAT AGTCCCCAAG CAGTACAGGT CACTTGAAGA CATAAACATT    300
CTTCTTGTT GAGGGATCCA CGCCCTTGT TCAGAAATGA CACCACAGAA GGCTGTGAGC    360
TCCAGGAGCA TCGGTTGGGA TGTCCGATG ACCGGGTTT AAAGGTTTC CTATTCTCGA    420
TAAAGCCTGT GCGCACTGTA CGGGGAGTGG GGGTGAAGCG TGTTCTCTAC ATAGGCAACA    480
```

CAGCCGCCTA AGTCACAAAG TCAGTGGTCG GCCGCTTCGA CCAACATGTG GTGAGCATTC 540
CACGGGCGCA TGAAGTCTGG GTGCTGTGCT CGAG 574

(2) INFORMATION FOR SEQ ID NO:1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGGGGCCAGG CGGCCGCCGC GAGTCTGGTA TCCTGAGCTT 60
CGTGAGTTGA GCGCTGCTGC TCCGCGGTGG AGTCACCGCA CCGCTCCCGG GATCATGGTG 120
TTCTACTTCA CCAGCAGCAG CGTTAATTCA TCTGCCTACA CTATTACAT GGGAAAAGAT 180
AAATATGAAA ATGAAGATCT GATCAAGCAT GGCTGGCCTG AAGATATCTG GGAGAGAATA 240
TAGAAGACAT CCCAAAGGAA GTGCTGATGG ACTGTGCGCT CGAG 284

(2) INFORMATION FOR SEQ ID NO:1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GTGAACACCA GAAAATACCC TGCAATTCAG CAGAACCAAA ATCCATACCT GCCCTTTCAA 60
TGGAACACA GAAACTTGGT TCAGTTTTGT CTCCAGAATC GCCAAAACCT ACTCCTCTTA 120
CTCCCCTGGA GCCTCAGAAA CCTGGCTCTG TTGTTTCTCA TGAGCTACAG ACACCTCTTC 180
CTTNTCCTGA GCCTTCAAAA CCTGCCTCTG TTTCTTCTCC TGAACCTCCA AAATCAGTCC 240
CTGTTTGTA GTCTCAGAAA CTTGCCCTG TTCCTTCTCC AGAACCACAG AAACCTGCCC 300
ATGTATCTCC TGAGTCAGTA AAGNTACTA TTNGTAATCC CAAACCCAG ATTCTCGAG 359

(2) INFORMATION FOR SEQ ID NO:1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GCCCCGCAGA TGGGAAACGC ATCATATTCT GATTCCTACC TGGAAGGAAT TTTGTTGAAA 60
GGGGTTTTCA CCTGTGAGCC TTGGTCTGTC TCGGTAGGGT GGTCAACTTC AGTGGACTGT 120
GGTTGGTTTC AGAGCGCCTG GCTGAGGAGT TCCACTGAGG GGAGCACTGG AGCAGCCCTT 180
TGGCAGAGGC TGAGGAGGGA GATGGACCA CCCACGCTG GCACCTGGCT CCATGGCATA 240
AGGAAAGGGA GATGCTGGCC TCTGTGCTCC TGCTGTCTTT TCCTGTTTCT GTTTGCGTTT 300
GACTTAGTAG CAACCGACAG AGTGGCAAGG GATTTGGTCT TCAGCAGTAG ACATCCTTCC 360
ACCCCTGCCC TCAGCCAAGT CTCTTGCTGC CATGCCAATG CTATGTCCAC CCTTGCCCCT 420

CGGCCCAAGA GTGTCCAGCG GTGGCCCACT TTTTCCTCCC ACCACAACCT CGAG

474

(2) INFORMATION FOR SEQ ID NO:1082:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 505 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

GAATTCGGCC TTCATGGCCT AATGTGTGTG GCACAAAGAA GAAAGTGGAC TCTACACTGT	60
GTTAGTTAGG AAAACCAGAA ATTGGGCCAA ATTGCCTGTT TAGTGGGAGA GATANCTTTT	120
GAGAGCTGTG ATCCCGCTGG TGTGGCTGGC TCTGGGCAGA TATTGTATC TGAAATGACT	180
CATGCTGTGG GACCCTTCCT GAGATCTAAC ACTTACAGTG GTTTGATCAG AAATTGCACC	240
ATGCTTGCCA AGCAACTTTT GGAATAAAG TTGCTGCCA CGTATATCAG GGAAGAATA	300
TATATATATA TATATATAGT ACCTATCTTA GCATCTGATT TGTATGACCA TTACTTCAAT	360
GTAAAATAAT AAATTGGCTT TCCAGCTTAA ACTTCAATTT CTTGTATATT ATATGATCAT	420
GAGACAACTT CCCTGGGCTG ATCAACAGCA GGACGCTAAA AAGATTGAGT ATCTGAGTCA	480
GGAAGGTAGA GGGCCAAACC TCGAG	505

(2) INFORMATION FOR SEQ ID NO:1083:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 481 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

GAATTCGGCC TTCATGGCCT ACTACTATTC AGAGACAACA GTGACACGGA CCTATGTGAT	60
GCTGGCCTTA GTGTGGGGAG GTGCCCTGGG CCTGGGGCTG CTGCCTGTGC TGGCCTGGAA	120
CTGCCTGGAT GGCCTGACCA CATGTGGCGT GGTTTATCCA CTCTCCAAGA ACCATCTGGT	180
AGTTCTGGCC ATTGCCTTCT TCATGGTGTT TGGCATCATG CTGCAGCTCT ACGCCCAAAT	240
CTGCCGCATC GTCTGCCGCC ATGCCAGCA GATTGCCCTT CAGCGGCACC TGCTGCCTGC	300
CTCCCACTAT GTGGCCACCC GCAAGGGCAT TGCCCACTG GCCGTGGTGC TTGGAGCCTT	360
TGCCGCCTGC TGGTTGCCCT TCACTGTCTA CTGCCTGCTG GGTGATGCCC ACTCTCCACC	420
TCTCTACACC TATCTTACCT TGCTCCCTGC CACCTACAAC TCCATGATCA ACCCTCTCGA	480
G	481

(2) INFORMATION FOR SEQ ID NO:1084:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 389 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

GAATTCGGCC TTCATGGCCT ACCATTTTTA TTAAACCCAA ATCCATGGAA AATATCATGG	60
---	----

AAATGAATAA GCGTCTAACA GAAGAACAAG CCAGAAAAAC ATTTGAGAGA GCCATGAAAC	120
TGGAACAGGA GTTTACTGAA CATTTACAG CTATTGTACA GGGGGATACG CTGGAAGACA	180
TTTACAACCA AGTGAAACAG ATCATAGAAG AACAACTGG TTCTTACATC TGGGTCCGG	240
CAAAAGAAAA GCTATGAAAA CTCATGTTTC TCTGTTTCTC TTTTCCACAA TTCCATTTTC	300
TTTGGCATCT CTTGCCCCTT TCCTCTGGAG TCTTCTTGA GTACTGATTT CATGTTGAAT	360
TGTATCCAC ACATCATGGT CATCTCGAG	389

(2) INFORMATION FOR SEQ ID NO:1085:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

GCGATTGAAT TCTAGACCTG CCTCGAGACC GCCTACGAAT GGAAATCCAT AAGAATGAGG	60
CTTGGCTCTC TGAAGTCGAA GGCAAAACAG GTGGGAGAGG AGACAGAAGA CATAGCAGTG	120
ACATAAATCA TCTTGTAACA CAGGGACGAG AAAGTCCTGA GGGAAGTTAC ACTGATGATG	180
CAAAACCAGGA AGTCCGTGGG CCACCCCAGC AGCATGGTCA CCACAATGAG TTTGATGATG	240
AATTTGAGGA TGATGATCCC TTGCCTGCTA TTGGACACTG CAAAGCTATC TACCCTTTTG	300
ATGGACATAA TGAAGGTACT CTAGCAATGA AAGAAGGTGA AGTACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:1086:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

GCTCCACCAG CTACTGAGAA AATGGCCTGT AAAGATCCAG AAAAACCCAT GGAGGCCTGT	60
GCCTCAGCAC ATGTGCAACC CAAGCCTGCC CCTGAAGCCA GTAGCCTAGA GGAGCCCCAT	120
AGCCCAGAAA CAGGGGAGAA GGTAGTAGCA GGAGAGGTAA ACCCACCCAA TGGCCCTGTG	180
GGGGACCCAC TGAGCCTCTT GTTTGGGGAT GTGACATCCC TGAAAAGCTT TGATTCATTG	240
ACAGGTTGTG GTGACATAAT AGCAGAACAA CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

GCAGAGACTT AAAGGGTTAA TAAAAATTGT AAAGCCAGCA GAGATTCCAG AACTAAAAAA	60
GACTGAACT CAGACTACAG GTGCAGAAAA CAAAGCTAAA AAGCTTACAT TGCCTCTATT	120
TGGTGCCATG AAAGGAGGAA GCAAATTCAA ATTAATAACT GGAACAGTAG GGAAGTTACC	180

CCCCAAGCGT CCAGAACTCC CTCCAACCTCT AATGAGAATG AAAGATGAGC CTGAAGTAGA 240
 AGAGGAGGAG GAAGAGGAAQ AGGAAGAAGA GAAAGAAAAG GAGGAGCAGC TCGAG 295

(2) INFORMATION FOR SEQ ID NO:1088:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 339 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAAATGAGGG TCCCTGAAGA AGCTCTTAAG CATGAGAAGT TTACCATTCA GCTTCAGTTG 60
 TCCCAAAAAT CTCAGAATC AGAATTATCC AAATCTGCAA GTGCCAAAAG CATAGATTCA 120
 AAGGTAGCAG ACGCTGCTAC TGAAGTGAC CACAAAACCTA CTGAAGCACT GAAATCCGAG 180
 GAAAAAGCCA TGGATATTTT TGCTATGCCC CGTGGTACTC CATTATATGG GCAGCCGTCA 240
 TGGTGGGGGG ATGATGAGGT GGATGAAAAA AGAGCTTTCA AGACAAATGG CAAACCTGAA 300
 GAAAAAACC ATGAAGCTGG AACATCAGGG TGCCTCGAG 339

(2) INFORMATION FOR SEQ ID NO:1089:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 433 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCGCC TTCATGGCCT ACTCAAGAAT ACAGGTCTTA CTCGTATAGT CTTGAACAA 60
 TAGGCTGTGT GACTAAAAGA GAGACACAAT CAATTGCTTC CCAGTCAAGA AGCCAGAAAA 120
 GCTTCAAAC CTTTCCCCCT CCCTACTCCT TGCCACCGCA CCTAAAAAAA AGAGAAATCT 180
 TTAAAGTGTT TAAAATCTGT AGGAGTCTTA TGAAGAAGCA GCTTTATGTG TATTCTTTAT 240
 GGCATAATAT TAATGCATGA AAATCTGTTG CTTTTTTAA AATTGTGGCA AAATATACAT 300
 AACATAAAT TTATCATTTT AGCTATTTT AATATACAAT TCACTAGCAT TAAGTATTAA 360
 TACATTACA GCACCATGTC AACCATGGCC ACCATCATCT CCAGAACTTG ATCTTCTTCA 420
 ACGCCCACTC GAG 433

(2) INFORMATION FOR SEQ ID NO:1090:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 319 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GACTGGGTCC ATGGGAGCAA GATTAGTGGC TGCTAAACTT GAACCGAAAA GCTTCAAACA 60
 TACCCATATA GATAAACAG ACTGCTCAGG GCCCCCCATG GACATAAGTA ACAAGGCTTC 120
 TGGGGAGATA AAAATTGCCT ATACTTACTC TGTTAGCTTC GAGGAAGATG ATAAGATCAG 180
 ATGGGCGTCT AGATGGGACT ATATTCTGGA GTCTATGCCT CATACCCACA TTCAGTGGTT 240

TAGCATTATG AATTCCTGG TCATTGTTCT CTCTTATCT GGAATGGTAG CTATGATTAT	300
GTTACGGACA CCACTCGAG	319

(2) INFORMATION FOR SEQ ID NO:1091:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GTGCAATTG AGCACATCAT TGAAACATT GTTGCTGTCA CCAAAGGACT TTCAGAAAAA	60
TTGCCAGAGA AGTGGGAGAG CGTGAACTC CTGTTTGTGA AAACGAGAGAA ATCGGCTGCA	120
CTTCCCATCT TTTCTCGTT TGTCAGCAAT TGGGATGAAG CCACCAAAAG ATCTTTGCTT	180
AATAAGAAGA AAAAGAGGC AAGGAGAAAA CGAAGAGAAA GAAATTTTGA AAAACAAAAG	240
GAGAGGAAGA AGAAGAGGCA GCAGGCTAGG AAGACTGCAT CAGTTCTTAG TAAAGATGAT	300
GTGGCACCTG AAAGCGGTGA TACTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1092:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 109 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GATCATGAAG TCCATCATCC CAGTGGTCAT GGCTGGCATC ATCGCCATCT ACGGCCTGGT	60
GGTGGCAGTC CTCATCGCCA ACTCCCTGAA TGACGACATC AACCTCGAG	109

(2) INFORMATION FOR SEQ ID NO:1093:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 388 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC TTCATGGCCT ACTGGAATTC ATAAGTCTAA ATGGTTCTAT GAGTCTAAAA	60
TTAAAGTGTT AGCAGGGCTG GGCTTCCTTT GGAAGCTCTA GAGAATGATC TGTTTTCATA	120
CCTTTCCAG CTTGTATGAG CTGACTACAT TCCTTAGCTC ATGGCCCTGC TGCCACAGC	180
TTCAAATGAG ACAACACCAA GTTGAGTCCT CTTTAGATCA CATCAATTA AATCTCCTAC	240
TATTCATATT TCCTGTGAC TCTCCTATGC ATCCTTCCTT CTCTTCAAAG GATCTTTGTG	300
ATTATACTGG GCCCTCTGAA GAATCCATGA TAATCTTATC TCAAGGTGCT TAAGTTAATC	360
ACATTTACAA GATCTCCTTT TCCTCGAG	388

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

```

GAATTCGGCC TTCATGGCCT AGGTGGCACA TGCCTGTGGT CCCAGTTACT CGGGAGGCTG      60
AGGTGGGAGG ATTGCTTGGG CCCGGGAGGT CAAGGCTGCA GTGAGCCGTG ATCTTGCCGC      120
TGTACTCCAG CCTGGTGATA GCGAGACCCT GTCTCAAAAA AATGCTTTTA GGGAAATTAA      180
TATGTCCTGT GCCTGTTTAA TCATTGAAAA CATTTTAATA TTTTCAGAGC CATAGAGGGC      240
AGTGAAAAAC AGAGTAGCAG AATTGATTAT ACCAGTACTA TTTATCCAAT GGCTAATACA      300
AATAAGACTC TCAGGGATAA TTCACACGTG CTTCCAAGAA CACTAGATGG CACCAATTAT      360
TAGGATTCA GACTACCTCA GGGAACAGCT GTCTTCATTC AACAAATATT TATTAAATAA      420
TGAACAAAAC AAAAATATCT GTCATTGTGG AGCAGCTCGA G                                     461

```

(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

```

GAATTCGGCC TTCATGGCCT AAACCTATGC AGATGCCTGT GATGAGTTCC TGGATCCCAT      60
TATGAGCACA CTGATGTGTG ACCCTGTGGT GCTGCCATCT TCCAGAGTCA CTGTGGATAG      120
ATCCACCATT GCAAGACATT TGCTCAGTGA CCAACAGAT CCCTTTAACC GTAGTCCCCT      180
CACCATGGAC CAGATCCGGC CAAACACAGA ACTAAAAGAA AAAATCCAAC GGTGGCTTGC      240
AGAGAGGAAA CAACAAAAGG AGCAACTGA ATAGATACTG TGAAC TAACC AAACCAAAAC      300
CAACCCCAAG TCTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

```

GCTGCAGCCA ACGCGCAGCT CCACTGGAAG AGGATGGAGA ACCTCAAGGA GGAGGAAGAT      60
GACGACTCCT CCACAGCCTC AGACAGCGAT GTTCTCATCC GGGACAAC TA CGAGCGGGCA      120
GAGAAGCGGC CCATCCTGTC TGTGCAGAGA CGTGGATCTC CCAACCCGTT TGAAATCACA      180
GACCGGGTGG AAATGGGACA AATGGCCTCC ATGTTCTTCA ATAAAGTGGG GGTCAACTTG      240
TTCTATTCTT GCATCATCGT TTACCTGTAT GGAGACCTCG CCATCTATGC TGCTGCCGTG      300
CCCTTCTCCC TCATGCAGGT GACCTGCAGC GCCACTGGCA ATGACTCCTG GCGGCTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

```

GAATTCGGCC TTCATGGCCT AGTGAGCCAC CGCACGGGGC CTAACGATGA TGAGAATTTG      60
ATGTGACATC TGCAGGATCC CCAGCTAGTC AGCAGCATCT AGAGGGCTAG AACTCTGGCC      120
AGCTGACTGG GCCTTTTGCT AACTGTTTTT TGTCCCTCT GTGCCGGGGT GTCAGTGGC      180
TTTGC GGAC AGGCTGGTCT GTCGTGCCTT CAGCTCAGGG AATGTGGCTC CCGAGCATAG      240
GGCTGGACTG AGAGGCGTTA GGTGAGCCAG AGAAGGCCTC AGACACAGGG CTTAGAGAGG      300
GCTCCCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:1098:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

```

GAATTCGGCC TTCATGGCCT ACCTGCAGCT CTACAATATA TTTTCAAAC TCTTGATATT      60
GAGAACAAAG GATACCTGAA TGTCTTTTCA CTTAATTATT TCTTTAGGGC CATAACAGGAA      120
CTAATGAAAA TCCATGGACA AGATCCTGTT TCATTTCAAG ATGTCAAGGA TGAAATCTTT      180
GACATGGTAA AACCAAAGGA TCCTTTGAAA ATCTCTCTTC AGGATTTAAT CAACAGTAAT      240
CAAGGAGACA CAGTAACCAC CATTCTAATC GATTTGAATG GCTTCTGGAC TTACGAGAAC      300
AGAGAGGCTC TTGTTGCAAA TGACAGTGAA AACTCTGCAG ACCTTGATGA TACATGATCT      360
CTGAAAGACT AGACTGTCTT ATATTATGAG ATACTTGAAT GCTGCATGTA AAGCCTTTAA      420
AGCAAAAAAC CTCGAG                                     436

```

(2) INFORMATION FOR SEQ ID NO:1099:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

```

GAGAAGATGC AAGTGGACCA GGAGGAACCA CATGTTGAAG AGCAACAGCA GCAGACACCA      60
GCAGAAAATA AGGCAGAGTC TGAAGAAATG GAGACCTCTC AAGCTGGATC CAAGGATAAA      120
AAGATGGACC TACCACCCCA AGCCAAGAAG GCAAAAGTGA AGACCACTAC TGTGGACCTG      180
CCAATCGAGA ATCAGCTATT ATGGCAGATA GACAGAGAGA TGCTCAACTT GTACATTGAA      240
AATGAGGGTA AGATGATCAT GCAGGATAAA CTGGAGAAGG AGCGGCTCGA G                                     291

```

(2) INFORMATION FOR SEQ ID NO:1100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

```
GAATTCGGCC TTCATGGCCT AGTCATTTTA TAGGTTAAAA AAAGGTCAAA TTGTGACAAT   60
TTCATATGGT ACAATATAAA ATTATATTAA ATATACTCGA G                        101
```

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

```
GAATTCGCCT TCATGGCCTA AGAAATACAT AGATCAAGTA AACTCCAAC TACTGTAGCT   60
GGAATTTGTA AACTAAGTTT GTAAGACCTC TTTTATTTCC TATGGAGTTA TTCTTTAATT   120
TACAGTTTAT TCTGTAAGTT GGGAAGTAAA ATAGAGAAAA TAATAAATCT AGATGTTCTC   180
AGTGTCCTAT TCAGGAACCT TTTATCCCTC CTCACTAAGG AATTCCTACT GTGACTTTAA   240
AATAGAACTA AATTACTTGT GTGCATGTAT ATGTCTGTAT TTTTACACA CATGCAAAAA   300
TATACATTGG GGGCACGTGT GTGAGAGATA TGAATGTGTG CTTATATAAA AATAGATAAA   360
GGTAACCGAA TGTATTGTAG AAACATGATT TATTTAGTTG AGGGTATTGG AGTTACTTTC   420
TCATTGTCTC TGTTGTATAA ATACACCAA TTAATCATTA TGTATCTTA TGTTAAAAGG   480
CTAGCTCTCG AG                        492
```

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

```
GAATTCGGCC TTCATGGCCT AGGCCTGCGT TAATACTCTT AATTATAGAA ACAATCCTTA   60
ATTAATAAAC AAGTCCTTTC ATTGGAAAAA GAACATAATC ATTTTGTTCT CTCAGTCAAA   120
ATTCTGTTTT TGTGGTTAGA GTAATAAAAT GGTAACACCT AGGGTCTGCC ACGATCATGG   180
TTCTCACTCT GGATTCATTC CCTACCACAT CCTTATTTCC CTCCTCTTCC CCATTCCCTC   240
ACTCACCTTC CTCCTTTCCT TCCCTCACTC ACCCTCCTCT TCCCCATTCC CTCACTCACC   300
CTCCTCCTTT CCTTCCCTCA CTCACCCTCC CCCTTTCCTC GAG                        343
```

(2) INFORMATION FOR SEQ ID NO:1103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

```
GAATTCGGCC TTCATGGCCT AACCGGGCAA AAAAAAAAAA AAATCTTAAA AGCACTAACT    60
TACTATCAAA TCTCAAGAAA CAGAAGCAAT TTCAAAAAAT CAATACTATC CTTTGGTCA    120
GTAACACTTT CTTCATTCCT AATGTATGAG AACATAAGG ACATTTTAGC TCCTTTACTC    180
TTCCTTCATT TAGTGACTTC CACATTTCTC TCACCATTTT TCCAGCCTCT GGGTGTGGTT    240
CTGATGAACC TTAAACTTGA AAGGCACAGG CCAGAACTCG AG                                282
```

(2) INFORMATION FOR SEQ ID NO:1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

```
GCGATTGAAT TCTAGACCTG TCTTACGCTT CCCTTCCTAA GCCTTTGTCT ACTCTGCTTT    60
GTCTGCTTTT ATGCTTCTCT CTCTTTTGTG TGAAGTGGTC TCTGTCCTCG TCCATGCTTC    120
AAGTCCTAAT TCAAATGCCA CTGTCTTTAT GAAGGGCTCC CTGATTGTTT CAACCAAAT    180
AAGCTTTTAT TCCTTTGAAC TCGAG                                205
```

(2) INFORMATION FOR SEQ ID NO:1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

```
GAATTCGGAC TTCATGGCCT ACGTTTTTAT TACAAATATT ACATTAACT AAAGCTCACA    60
ACTGTTACTA TGCATCAGGA ATTAACAGTC ATTTCTCATT TGTGTTATTC TCCTATTTGA    120
TCACATATAG TGAATATCTC TTTATGGGTT AAATATCAGT TTCTTGCCA GAATTCAAGA    180
TCTGCCCCTA ACNAATCCTA CTTCTCCAG TACCCTTACA GCACTCCTAC CCTACTAGTA    240
ACCCTCGAG                                249
```

(2) INFORMATION FOR SEQ ID NO:1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

AATTCTAGAC	CTGCCTCGAG	ATTGTCTGCC	AGTTTAATTC	TTTAAAACTC	AGTTTAGCTG	60
TCCTTTTCTT	TGGAACACTT	TCCCTAATCT	TCCCCACCAC	CTGTTTCATCA	ACATATATAG	120
AAGCACATTT	ACTCTCTCAT	TCTCTCTCTT	TCTCTCTCCA	AGTCTATGTT	AGGTGTTTTA	180
CGGTTTATCA	TAGGTTTATG	TTTACTTATC	TCCCCACTAG	TCTATGAAAT	CCTCGAG	237

(2) INFORMATION FOR SEQ ID NO:1107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

GATTTATTAT	AAAGCTGCAA	AGAAGCTGTT	GCACTCAGGA	ATGAAAATTC	TTAGCCAGGA	60
AAGAATTGAG	AGCCTGAAGC	AGAGCATAGA	CTTCATGGCT	GACTTGCAGA	AAACTCGAAA	120
GCAGAAAGAT	GGAACAGACA	CCTCACAGAG	TGGGGAGGAC	GGAGGCTGCT	GGCAGAGAGA	180
GAGAGAGGAC	TCTGGAGATG	CCGAAGCACA	CGCCTTCAAG	AGTCCCAGCA	AAGAAAATAA	240
AAAGAAAGAC	AAAGATATGC	TTGAAGATAA	GTTTAAAGC	AATAATTTAG	AGAGAGAGCA	300
GGAGAGCCTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:1108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

GCGAGAACAC	CATCACCATG	ACAACCAGTC	ACCAGCCTCA	GGACAGATAC	AAAGCTGTCT	60
GGCTTATCTT	CTTCATGCTG	GGTCTGGGAA	CGCTGCTCCC	GTGGAATTTT	TTCATGACGG	120
CCACTCAGTA	TTTCACAAAC	CGCCTGGACA	TGTCCCAGAA	TGTGTCCTTG	GTCACGTCTG	180
AACTGAGCAA	GGACGCCCAG	GCGTCAGCCG	CCCCTGCAGC	ACCCTTGCCT	GAGCGGAACT	240
CTCTCAGTGC	CATCTTCAAC	AATGTCATGA	CCCTATGTGC	CATGCTGCCC	CTGCTGTTAT	300
TCACCTACCT	CAACTCCTTC	CTGCATCAGA	GGATCCCCCA	GTCCGTACGG	ATCCTGGGCA	360
GCCTGGTGGC	CATCCTGCTG	GTGTTTCTGA	TCACTGCCAT	CCTGGTGAAG	GTGCAGCTGG	420
ATGCTCTGCC	CTTCTTTGTC	ATCACCATGA	TCAAGATCGC	GCTCGAG		467

(2) INFORMATION FOR SEQ ID NO:1109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 74 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

GAATTGCGGA	AACGGTCGTT	CCACTCGCTC	CAATGTGGCC	CCCAGGCACC	TACCTGATAG	60
CCATATGGGT	CGAG					74

(2) INFORMATION FOR SEQ ID NO:1110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

```

GAATTCGGCC TTCATGGCCT AGGAATTTAG GAACCAAGAT ACTGGGGTGT TATTGTTTCT      60
AAGCTCTTTC AGTGAACAGA TCTAGGAAAT ACATGTGTGT CCTAATCCAT GAATACACAC      120
TAAAATATAA TTATTTCTGT ATCTATGTCA AGCTAAACCT AAGTTCACAT TGAGGTTTCT      180
GACTTTAATA CAGTCCCACA AGGTTTCGTT TAGCTTTCCT TCCTTGCATA CCTTTGACTT      240
TCCTCTCCAG CTGTGGGAAA CTGGGCTCTC TCCATCCACC ACCCCTTCAC TATTGTGTTA      300
ACCTTTGTAC ATATATAAAG CAGCGTTGGA ACTGTCAACC TGTGTCCCAT GAGAACTTT      360
ACCCACTAGA GTACAGCGTT TATGCAGTTC TTTTGTAGT TTTTATAGAT TATAGCCAAA      420
ACTCGAG                                           427

```

(2) INFORMATION FOR SEQ ID NO:1111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

```

GGTGAACCCG AATCACCAGT GGATGTGGAT AATTCTAAAA ATAGTTGTCA AGACTCAGAA      60
GCAGATGAGG AGACAAGTCC AGGTTTGTAT GAACAAGAAG ATGGTAGTTC CTCCCAAACA      120
GCAAATAAAC CTTCAAGGTT CCAAGCAAGA GACGCTGACA TTGAATTTAG GAAACGGTAC      180
TCTACTAAGG GCGGTGAAGT TAGATTACAT TTCCAATTTG AAGGAGGAGA GAGTCACACT      240
GGAATGAATG ATTTAAATGC TAAACTACCT GGAAATATTT CTAGCCTGAA TGTAGAATGC      300
AGAAATTCTA AGCAACATGG AAAAAAGGAT TCTAAATCA CAGATCATTT CATGAGACAG      360
CCCAAACTCG AG                                           372

```

(2) INFORMATION FOR SEQ ID NO:1112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

```

GAATTCTAGA CCTGCCTCGA GCTATACCTG TATCCAGTCT TGATGCACAC CAGGCTGGGC      60
ACTTTCCAGA AACTACCTCT AACCTCCAGG GTTCCCTCAT CACTCGAG                      108

```

(2) INFORMATION FOR SEQ ID NO:1113:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 382 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

GAATTCGGCC TTCATGAAGA TTGAGAAGAA GGAGGAAAAA AAGCCTGAAG ACATTAAGAA	60
GGAAGAAAAA GACCAGGATG AGCTGAAACC CGGACCTACA AATCGGTCTA GAGTCACCAA	120
ATCAGGAAGC AGAGGAATGG AGCGGACGGT CGTGATGGAT AAATCGAAAG GAGAGCCCGT	180
CATTAGCGTG AAAACCACAA GCAGGTCCAA AGAGAGAAGC TCCAAGAGTC AGGATCGCAA	240
GTGAGAAAGC AAAGAAAAGA GAGACATCTT GTCGTTTGAT AAAATCAAAG AACAAAGGGA	300
GAGAGAGCGC CAGAGGCAGC GGGAACGGGA GATCCGCGAA ACGGAGAGGC GCGGGGAGCG	360
CGAGCAGCGG GAGCGTCTCG AG	382

(2) INFORMATION FOR SEQ ID NO:1114:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 253 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

GAATTAGCAA AGGAAATCTC AGATTGCATT TCCAAAGATG GTTGCTAGCT GCTGCCGTTT	60
CCTTTGCTAT TTCTGTCGAA TTAGCCGGCA AAATCAGAAG GCCATGTTTG AGCATCTGAG	120
TTATCTTCTG GAGAATAGCA GTGTTGGCCT AGCCTCCCCG TCGATGAGGG GATCCACCCC	180
GCTGGATGTG GCAGCTTCCT CTGTGATGGA CAACAATGAG TTAGCGCTGA GCTTAGAGGA	240
ACCAGACCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 76 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

GAATTTTTTT TTTTTTTAAA GAAAGAAAAC TAGGGCGATG CAATGTCCAG ACAGAAGCCG	60
GGGGCCGGGG CTCGAG	76

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 70 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

```

GAATTCGGCC TTCATGACGA CCGCGTCCAC CTCGCAGGTG CGCCAGAACT ACCACCAGGA    60
CACCTTCGAG                                     70

```

(2) INFORMATION FOR SEQ ID NO:1117:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 526 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

```

GAAAATGAAA AGTTCTGTCT TTGATGAAGA CAAAACCTTT GTAGCAGAAA CATTGGAAAT    60
GGGTGAGGTT GTTGAAAAGG ATACAACAGA ACTCATGGAA AAACCTGAGG TAACCAAGCG    120
AGAGAAATTA GAGCTGTCAC AGAGACTGTC TGATCTTTCT GAACAATTGA AACAGAAACA    180
TGGTGAGATT AGTTTCTTAA ATGAAGAAGT TAAATCTTTA AAGCAAGAGA AAGAACAAGT    240
TTCATTGAGA TGTAGAGAGC TAGAAATCAT TATTAACCAC AACAGGGCAG AAAATGTACA    300
GTCATGTGAT ACTCAAGTAA GCTCTTTATT AGATGGAGTT GTGACTATGA CAAGCAGGGG    360
TGCTGAAGGA TCAGTTTCTA AAGTAAATAA AAGTTTTGGT GAAGAATCAA AAATAATGGT    420
GGAAGATAAA GTTTCCTTTG AAAATATGAC TGTGGAGAAA GAAAGTAAGC AAGAACAGTT    480
GATTTTGGAT CACTTACCAT CTGTAACAAA GGAATCTTCA CTCGAG                    526

```

(2) INFORMATION FOR SEQ ID NO:1118:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 190 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

```

CGATTGAATT CTAGACCTGC CTCGAGCCGA CCTACTCCAC AGCTGTCCTG ACTGTGTAAG    60
CGAGATGATG ATTAGTGATC AGACGAAAGG ATTCCTGTCA TTGGTAACCC TCTCAAAGTA    120
TTTGAAAAC AGTTCAATTT TCATCTATTT CAGAAGCACG CCGTGGTGTC TATTGAGGCT    180
CACCTTCGAG                                     190

```

(2) INFORMATION FOR SEQ ID NO:1119:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

```

GAATTCGGCC TTCATGGCCT ACCATCCTGC ACTCAACCAA TCATCTGATG CTGACTCAGA    60
AGCTCTGTTT GGAGTACCTA ATGATAAGAA TTTACTGTGG GCTTATGCTG TTATCGGTAT    120

```


TTACATGTTT	TTAGTTTCTG	TCATTTTTTT	TTGTCTGTTT	TTAAAGAATA	GCTCAAAGCA	180
AGAAAAAGCA	AGAGCATCTG	CTGAGACATT	TCGAAGAGCA	AAATATCACA	ACGCCCTTCT	240
TTGTCTCCTT	TTTCTGTTCT	TCTTTTTTTA	TGTTGGAGCT	GAGGTAACAT	ATGGCTCTTA	300
TGTTTTCTCA	TTTGCAACCA	CCCATCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

GAATTCGGCC	TTCATGGCCT	ACAGATTGTC	ATCTTTACAA	CCAGAAGCTC	AGGGAGAAGT	60
TGAAGGAGGA	GGAGAACACA	GTGGGTATGT	TCAGATTGCT	TTTGGGTACC	CTTGATCCAG	120
CCACATTGTC	TACCCTAGAT	GGGTGCTCAT	GGTACTTCTT	GGTGGCATT	CAATAATAGG	180
TTGAGTTGTA	TACCGTCTGT	CTTTACACTA	CATTATGAAA	ATGAGATTAT	TAAATAAGAA	240
TTTTGATGTA	GCTGATAAGC	TAGTAGAATT	GGCACATGAT	CCCTTTTATA	CCCAGCCCTC	300
CTGTCTGGTG	TGCTTGAGGT	AATAATAACC	CCTTTTATAC	CCAAACCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

GAATTCGGCC	TTCATGGCCT	ACCAATCTCT	TTTACTGAGC	ACAATGTGGG	TAAAAGTGCT	60
CTCTATAGTA	GCAGAATTTT	GTTTTTCCCC	TTTCTAGT	ACTGATGAAG	AGACAGCTTC	120
AGATGCTCTG	GAGAGAACT	CTCTATCCTC	TCAAGACCCA	CAGCAGCCCA	CCAGTACTGT	180
CTCAGTAACG	GAAGATTCTA	GTACATCGGA	GATTGACAA	GAAGAGAAAG	AACAAACCAC	240
TCAAGATCCT	GACTTGACCA	CCGAAGCAAA	TCCTCAGTAT	TTAGGACTGG	CAAGAAAGAA	300
AAGTGGCATC	CTGCTGCTCA	CGCTGGTGTC	CTTCCTCATT	TTCATACTCT	TCATCATAGT	360
CCAGCTCTTC	ATCATGAAGC	TGAGGAAAGC	ACATGTGATA	TGGAAGAGAG	AAAACGAAGT	420
TTCAGAACAC	AACTAGAAA	GTTACAGATC	AAGGTCAAAT	AATGAAGAAA	CATCATCGCT	480
CGAG						484

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

GAATTCGGCC	TTCATGGCCT	ACTTATGTTT	TTCTCATTTG	TTGACCTAAA	TGATCTTTAT	60
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CCAAACTATT CCAAAATCTG AATTTCTGGG TCCTTCTTTC TTAAAAATAT TCTGTTCAAT    120
ATTAAACAAA CAAACGTTTG AGAACATGAG TAACCTTTTG ACTTTATCCC GTATCTGTTT    180
GCTAATGTTC TGTTCATGT CTTTCTTGTC AGAACACACT GTTGACAGCAG CTAGGAGTGC    240
ACTCGAG                                         247

```

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

```

GAATTCGGCC TTCATGGCCT AGGAGGAAGC TAATAAGAGA CTGTCAAGAT TGTATACCTT    60
CTTGGTTTCT TTTAAGAATT TGTGTCCTTT CTAATATTAC AGCAAAGCAG CATTGTGTTA    120
CTGACTGCCT AAAATCACTT AATCTCAGGT GAACGCATCA CTTGCCAAAC TGTGGAATG    180
CTATTTGTGT TTTGTTGCAC TGTTTTTTTC GTTTGTTTGT TTGTTTATTT GGTGGCTTT    240
TTGGAGAGGG AAATTGGAA ACGGGACACA CTCGAG                                         276

```

(2) INFORMATION FOR SEQ ID NO:1124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

```

GAATTACTAG CAGAGATCAG TGCTATAAGG GAAAAGGAGA TTGATTTGAA AGAACTGGA    60
AAAAGAGACA TTCCCATGAT GGAGAAAGTA TCAGGAAAGA TGGCTGTTGT TGAAGAAATG    120
GAGGCAGATT TGAAAGAAAC TGGAAAAGAA AATTTTAGAG AGAGAGGATC TGAAGAGATC    180
TGTGTTACTG AGGAAAAGGT GGCAGAATTG AAACAAACTG GAAAAACAGA CATTCTCCA    240
AGGGCCCTCG AG                                         252

```

(2) INFORMATION FOR SEQ ID NO:1125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

```

GAATTCGGCC TTCATGGCCT' AAACAGAATA TTCTGAGGCT AAAAGAAAAT ACACCCCGC    60
AAAAATCAAT ATAACATGA TTAAGTACAC AAAACATGCA GCCCATAAAA CATATTTTAC    120
CTATGAAACT GAGACTGAGG AATTTAACAG TAAACAGTCA TTTGTAAAG AAATATTTT    180
ACAATTTATT GCCTATGTAT AAGGCAGCAG GCCTGTACTC TCTTGATTT TCAATCTCTT    240
CCCCTACTCT GGCTCTTCCT CAGCATATAA ATATGTTTCT ATCCCTACCT TATGGAAACC    300
ATTCCCCATC CCTCGAG                                         317

```

(2) INFORMATION FOR SEQ ID NO:1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```

GAATTCGGCC TTCATGGCCT ACTTTGTAAC TGTGAAATAC TCTCCAGGAT TTAAAAGGCT      60
GTGGAGCTCC AGATAAAGAA TCGTTTATCT TTCTTCTGAA GAAATTCCTT TGGTTACAAG      120
TTTACCCCAT AAACGGCAAC ACACTCACCT CCATCCAAGA CAGACTCAAG GTGGAGGAAG      180
CGTGGAATG TGCTTCGGA CAAAGCTCTC AGTATCCTGG GTGCCATTGT TTCTTCTACT      240
CAGCCGTGTT TTTTCTACTG AGACAGACAA ACCCTCAGCC CAGGACAGCA GAAGCCGTGG      300
GAGTTCAGGC CAACCGGCAG ACCTGCTACA GGTCTCTCT GCTGGTGACC ACCCACCCCA      360
CAACCACTCA AGAAGCCACT CG                                     382

```

(2) INFORMATION FOR SEQ ID NO:1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC TTCATGGCCT ACAGACTTCT GTGTGTGGGA CTGAAGCACC TGTGTGCAA      60
TCTGAAGAAG CTCTGGTTGG TCAGCTGCTG CCTCACATCA GCATGTTGTC AGGATCTTGC      120
ATCAGTATTG AGCACCAGCC ATTCCCTGAC CAGACTCTAT GTGGGGGAGA ATGCCTTGGG      180
AGACTCAGGA GTCGCAATT TATGTGAAAA AGCCAAGAAT CCACAGTGTA ACCTGCAGAA      240
ACTGGGGTTG GTGAATTCTG GCCTTACGTC AGTCTGTTGT TCAGCTTTGT CCTCGGTACT      300
CAGCACTAAT CAGAATCTCA CGCACCATCT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GAATTCGGCC TTCATGGCCT AGTCTGTCCA TCTGCTTTCT CTGGACCTCC TTCTCATACT      60
TTGAATTTTT TAAGTAGTTT GTCCCTCATA TGATTTTTTT TCTATTCCTT TTTCCCTTCC      120
TGTCTTCTCT TCACTCCTTT CCCTCCCACC TCCCTCCCCT CCTTCCTCTC TCCCTTCTCT      180
CCTTCCTTCC ATCCAACCAT CCATCCATCC ATCCATCCAT CCATCCATCC ATCCATCTAT      240
CCACTCTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:1129:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

```
GAATTCGGCC TTCATGGCCT AATTTTCATGT NCCTTTGAGC TATCTTTCCA TTTTGTAGGA      60
ACACCGTCAC AGGAGACAAT TTCATGGACC TTGAGCTGT CTTTCCATTT TGTGGGAACG      120
CCGTCACAGG AGACAATTTC ATGTGCCTTT GAGCTGTCTT TCTATTTTGT AGGAACGCTC      180
TCAGAGGGGA CAATTTTCATG TGCCTTTGAG CTGTCTTTCC ATTTTGTAGG AACACTCACA      240
GCAGTGCTTG GGGTTCACCTG TTACCTAAAT CCCATGATGG GTGAGAAGAC TGAATGGGAC      300
GTTTATTTT TGTGTTAAAA AGCCCACGCA AATAGAGTTT AAAATAGTCT CAGTGAGCTG      360
GGCATTCTCG AG                                         372
```

(2) INFORMATION FOR SEQ ID NO:1130:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 275 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

```
GAATTCGGCC TTCATGGCCT AGTGCCTAGT TACAAGGTTT TATTACAGCA GTATTCTCTAA      60
ACATTGTTGTT AGTCTGTCTC TGCTTTTCCC ACCATAATTT TCTAGCACTT GTAGCTCACC      120
TTATCTCCCA CTTCCTTTT TAAATAGAAA ACAGGCTTGT TCTGTTTGA CCAGGTATAA      180
CTCTTTGCTC AGACTGTCTC TAAAGCCCAG AAAACTATTC CTCTAGTGGT CCAATGAAGT      240
GTTCCCCATT GAAAGTTTGC CTCATGTCAC TCGAG                                         275
```

(2) INFORMATION FOR SEQ ID NO:1131:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 388 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```
GAAAATTGAG CCTATGTTGG AGACACTGGA GAATCTTTCC TCTCGCCTGC GTATGCCACC      60
ACTGATCCCT GCTGAAGTAG ACAAGATCAG AGAGTGCATC AGTGACAATA AGAGTGCCAC      120
CGTGGAGCTA GAAAAACTGC AGCCATCCTT TGAGGCCTTG AAGCGCCGTG GAGAGGAGCT      180
TATTGGACGA TCTCAGGGAG CAGACAAGGA TCTGGCTGCA AAAGAAATCC AGGATAAATT      240
GGATCAAATG GTATTCTTCT GGGAGGACAT CAAAGCTCGG GCTGAAGAAC GAGAAATCAA      300
ATTTCTTGAT GTCCTGAAT TAGCAGAGAA GTTCTGGTAT GACATGGCAG CTCTCCTGAC      360
CACCATCAAA GACACCCAG GACTCGAG                                         388
```

(2) INFORMATION FOR SEQ ID NO:1132:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

GAATTCGGCC	TTCATGGCCT	AAAGTTATAC	CAGCTAAAGT	GCAGTAGTGT	CACTTTTTC	60
CTGTCAATAT	ATAGAGACTT	CTAAATCATA	ATCATCCTTT	TTTAAAAAA	AGAATTTTAA	120
AAAAGATGGA	TTTGACACAC	TCACCATTTA	ATCATTTCCT	GCAAAATATA	TGTTTGGCTG	180
AAATTATGTC	AAATGGATGT	AATATAGGCT	TTGTTTGCTG	CTTTTGATGG	CTACGTTTTG	240
GAGAGAGCAA	TCTTGCTGTG	AAACAGTGTG	GACTCGAG			278

(2) INFORMATION FOR SEQ ID NO:1133:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

GAATTCGGCC	TTCATGGCCT	AATCATTATA	ATTTAGTTTG	AATTCTTAAA	ACCCCGTTAC	60
TAGAACTTAT	GTTTAAATTT	ATAAATTATA	AATAGTTATA	AATTATAAAT	AAATTGAGAC	120
TGAGGCAGGA	AAATCACTTG	AACCCAGGAG	GCAGAGGTTG	CACTGAGCCA	AGATCACGCC	180
ACTGCACTCC	AGCCTGGGTG	ACAGTGAGAC	TCCATCTCAA	AAAAAAAAAA	AAATTATATA	240
TAAATCTGCG	TAAGTAAGTT	TGAAGAAAAA	CCGATTCAAA	TAGTATATAT	TCAGCTTTAT	300
AAATTCTGTT	AAGCATATTT	GAATGAGAAT	TTATTAAAAA	GGTTTATATT	AAGTCTACGG	360
TTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 441 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

GAATTCGGCC	TTCATGGCCT	ACGTCTGATT	CTCTAAGTTC	ATTTCTTGGT	GGTGGAGGCT	60
CATTTCTTCT	GGAGTCACTG	AAATTTTTTG	GATATCTTTC	GAAGCTTGGA	TCTTCCCTTC	120
GTGCAGTAGG	TCGTGCTTTT	TTCCCTCAC	TTTGACCAAC	AAAGCGATCC	CGCCTTTCAA	180
AAGATGAAGA	CTGTACTGCT	GAACTCTCAG	GAAACCTGCC	CCTCTCTCGG	TGATCAAAGT	240
CATTAAATCT	GTTCTGTTGG	CGAGAGTAGT	CGGATCCATG	GCCAAATCGT	GCATCTGTAT	300
CTAGAGACAA	CTTTTATTC	TCGCTCCAGT	AAGGATCATC	TCGCCTATGA	TCTACATCAC	360
GTGGGCGTTT	CAAGGAATTC	CTTTTCTT	GTTTATAACG	AAGCTGCTGT	TGTTGCCTTC	420
TGAGTTCCTC	TCTTCTCGA	G				441

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

GCGATTGAAT TCTAGACCTG CCTCGAGCAA GAAACGTTTT CTAAGTCAAA GGAATAAATC	60
CAAAGCCTCT AAGACTGGGT GAGAGAGAGG AAAAGAAATG ACGGAAGCAC TCGAG	115

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 253 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

GAATTCGGT TTTACTGAAG CTATGTTAGA AACGTCATGT AGAAACTCTT TAGATACTGA	60
GCTTCAGTTT GCTGAAAATA AGCCAGGCAT GTCTTTGTTG CAGGAAAACG TAAGCACAAA	120
GGGTGACGAT ACAGATGTCA TGCTCACAGG TGACACTTTG AGCACCTCAT TGCAGTCTTC	180
CCCAGAAGTG CAGGTACCTC CTACCTCCTT CGAAACAGAA GAAACGCCCC GTCGGGTACC	240
CCCAGATCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:1137:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 339 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

GAATTCGGCT TCATGGACGA GGAGATCGTG TCCGAGAAGC AAGCCGAGGA GAGCCACCGG	60
CAGGACAGCG CCAACCTGCT CATCTTCATC CTGCTGTCTA CCCTCACCAT TCTCACAATC	120
TGGCTCTTCA AGCACCGCCG GGCCCGCTTC CTGCACGAAA CCGGCCTGGC TATGATTTAT	180
GGTCTTTTGG TGGGCCTTGT GCTTCGGTAT GGCATTATG TTCCGAGTGA TGTAATAAT	240
GTGACCCTGA GCTGTGAAGT GCAGTCAAGT CCAACTACCT TACTGGTAAA TGTTAGTGGA	300
AAATTTTATG AGTATATGCT GAAAGGAGAG ATACTCGAG	339

(2) INFORMATION FOR SEQ ID NO:1138:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 363 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

GAATTCGGCC	TTCATGGCCT	AATTCAGAGG	TGGTGGGACC	TTGGCTATGA	TTCTGTTCAA	60
GCCCCCTAAT	TTTACAGATT	TTATGGAATT	GAGCAACAGA	CAAGATGATT	TTGCCTAGGT	120
TCATAAACAG	GAAAAAAGGA	GAGCCAGGAA	AGAACTCAAT	TGTTGTAAAC	TGCTGTCTTG	180
TCTTGATGTT	CTGTCTTCAT	TCATCATCCA	GCCTTTCCTA	GGAGTGTCAG	AGATAGACCC	240
AGGTAGAAGT	GGGCTGCCCA	TGGGGGGCTT	AGCACACAG	AAATTTATT	TTTTACTGTT	300
CTGGAGGCCA	GACATCTAAA	ATAAAGGTGT	TGATGGGGTC	ATTCTTCCTC	TTGAGGGCTC	360
GAG						363

(2) INFORMATION FOR SEQ ID NO:1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

GAATTCGGCC	TTCATGGCCT	ACTTGTAAGAA	TATTGAGCAA	TTTGTGTGAA	GTGGGGAAGA	60
TGAAAGAAGT	CAGAAATTTGA	AACGGAAGAA	TGAAGAAAAG	AAATAAAAAT	GAAGTTAAGA	120
TAAGAAGTAA	TCTGGAATCA	GAAAGCACTA	CGCTAAGAAT	CCCGTTCTGC	TTCCAGAAGT	180
GGAAGTGCTC	ACGGATCGGG	GAAATCTGCA	AGGCATACCC	CTGCAAGGTC	TCGCTCCAAG	240
GAAGATTCCA	GGCGTTCCAG	ATCAAAGTCC	AGGTCCCGAT	CTGAATCTAG	GTCTAGATCC	300
AGAAGAAGCT	CCCGAAGGCA	TTATACCCGG	TCACGGTCTC	GCTCCCGCTC	CCAAGGACGA	360
TCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

GAATTCGGCC	TTCATGGCCT	ACACCCTCAC	CACCCAAGGG	GTCTATCATCT	CTGGCCACCA	60
CTCCACCAGA	TGGGCAGAGC	AGCTATGACC	GCCACCCAGC	CCTCCCGCTC	AGGCCACAGC	120
CGGAGCCTCC	GCATTGCCCC	CACCCCATTT	TTCCAGGGGG	GTTGTAATTT	ATAAGCTGAC	180
GAAGGTAGCC	AGACTTCCGG	AGGACTGACC	ATCTCTCACT	GTCTCTCCCA	CCTTCTTCCT	240
CACTCACACA	TTTTTTGTAC	ATCTGGGCCC	TTAGTTTTTA	TTCTGTTTAT	TATATGTCTC	300
TGTCTCTCTC	TATTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGG	360
TGCAGGAGTG	CCACCCCCAG	GGCCTCGAG				389

(2) INFORMATION FOR SEQ ID NO:1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

GAATTCGGCC	TTCATGGCCT	AGCAGCACTA	ATCTTGATGG	GACAGAAAAT	TTCAAATGAA	60
GAGCTTTCCC	TCTTTTTTTC	TTCCTTGGGG	GCATGCCAGC	TTGTGCTTCT	ATGTCAGTAG	120
CCTTGTAAGT	GCCATTCCCTG	GCCCAGACAC	TGCAATGCAG	TTGGTTTGT	CCTCCACCAC	180
TTTGATCATG	TTGCCCATGG	TCTAGACACC	TCCGTGTCCT	TGTTATCATG	GCATATAGTC	240
TGTATGCCTC	TGCTGGATTT	ATAAGCGGCC	CCATAATAGC	CTTCCTTTCT	GGTTACCCCC	300
TTGATCTCGA	G					311

(2) INFORMATION FOR SEQ ID NO:1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 530 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

GAATTCGGCC	TTCATGGCCT	AAAAGATCAG	ATTTTGTGTCAT	TTAAGACACA	TATTTTACAT	60
TCAAAAATGT	AAAGTCAGGG	TGTGTCTTAA	AATCCATTGG	TGTTTTAATC	ATGCTTAAAC	120
ATGTGACTGC	TGTTGGCCAG	GATACAGTTG	TGGTGGTGTC	GTCAGTATCT	GAGCACATGT	180
GAACCTTNGCC	ATGACTATTC	ATATTGTCTT	CTCTTAAACT	GAATTATGTC	CATGGTTGCC	240
AACATGTACT	GTCCATAGTT	GCCACCATGT	ATTTAGGTTG	TCATTTAAAA	TGTCCTCAAA	300
AAGATTTTAC	CATGATTCTC	CATCAAAATA	GAAAGCTATT	TTGTATGAAG	AAGAAGTCAG	360
ACCAGAAAAG	TCTGATAAAA	ATAATCTCTT	AAATAAGTCT	ACATTAGGTC	TTTCAATTTG	420
TATAAAATGT	AAATTTTGAA	TTATAAGAAA	ACAATTTGTT	ATACTGTAAT	TGGTAGCATT	480
TTTCTTAGT	AGTGACAAA	ATAATGTGTA	CCTTACATTC	AAATCTCGAG		530

(2) INFORMATION FOR SEQ ID NO:1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 615 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

GAATTCGGCC	NNCATGGCCN	ACCTATGTNA	NGNATTTCNN	CTCCATTNCC	CCNAGGGTTC	60
TTTCCTGTTT	TTAGAAATGT	TTTGTGATTT	TGCTTCAGAC	ACAGTTTGTC	TACTTCTNGT	120
AAGCATTGTT	CTTAGATNGC	TGGCTTTATA	TCTATCACTC	CCTTGCTCAT	CTGCCCATCC	180
ATCTATCCAT	CCATCCATCC	ATCCATCCAT	CATCCCTCCA	TCCACTTGCT	CATCTGCCCA	240
TCCATCCATC	CATCTATCCA	TTCATCCAGT	CCATTACCCA	CCCACCATCT	ATTATCCATC	300
CATCCATCCA	TCCATCCATC	CATTCATCCA	CTCACCATT	CATCCATCAT	CCATCCACTC	360
ANCCATCCAT	TCATTAGTTC	ACCCTTCATC	CATCACTCA	CCCATCCTTC	CATCCACTCA	420
TCCAATCACC	CATCCATCCA	TACATCCACT	CATCCATTCA	CCATCCATAC	ATCCACTCAT	480
CCATTCATCC	ATCCATCCAC	CCACCCAGAC	GTCCGTCCAT	CNATCCATCC	ATCCATNCAT	540
CCTTCTATNN	NNTCTGCCAA	CAATCCANAC	ACNTGTCCNT	CNATCCCTTC	CAACCACTCA	600
CCCAGCACAC	TCGAG					615

(2) INFORMATION FOR SEQ ID NO:1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTCGGCC AAAGAGGCCT AACGCGGCC GCTACTTCGG CCTCTTTGGC CCTCGAG 57

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 227 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTCGGCC TTCATGGCCT AGGTTTTCTT TTATTTAAAA GATCATTCAC AAAATACCAT 60
ATCCATAGAT TTACTTTCTG TCATATAGCT GAATGTGTTA AGTGGTTGGA ATTCCATTCT 120
TACATTTAAA GGTCAACTGG ATTGCCCAGC AGTTTAGATG CATGTGTTTT GTTCTTTATC 180
TTATCCACAT TGAAGATGTA AGTATTGAAT TCTAGACCTG CCTCGAG 227

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 447 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

CTCGAGTATC TCCTCCTTTC TGATATCCAG TTTAGGTGGT CCAATTTTTC CATCTCGGCA 60
TACAGCAAAT TCTTCTGACT TTGCATAGGC AGATTCTTTT TGTCCAACCC TGGCTTTAAC 120
TCTGACCCAA AGAGAATTTG ATGGATCACC AACATGATCA GAAATATTAC AATAATGATG 180
AGAAATATTG ATGCAGGCAT CAATCCATTG TGAATTCTTA ACACCATAGT TCTTTACCTC 240
TACGGTAAAA ACAGGGACCT GTGGCATGAT CTGGTACTCC CAATATACGA TAGGGTTTCAT 300
GTTATAGGAT TCAATTGTAA CATTAGTTGG TGTAGGCACT GAGGACGGCC CCAGATCCGC 360
GGTGCCCATC TCAGCCCTGC TCACACCCTG CATGACAAGG GGTAGGAGAA AGAGGAGAGC 420
CATGCTGCTA CCGACGGTCG CTGGCTC 447

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 271 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

```

GGGCGCCATG TTTGCCATCT CAGGTCCAGG TTTCTCCCGG ACTTCGAAGA GCTCATTATC      60
GGGTCTGATT TTCAGCTCCT TCTGCAGAGT CTTCCGGAGC TCCAGCATCC GCTGCTGCAT      120
CTGCTTTATG GTCTTATTTT TCTCCAGAAG TTGCTGCTCC AAGTCCTGTT TCTCCTTCTG      180
TAGCTGTGTG AGATCCATGG CCCCAACCTC ACCATTGTTG GTTCTTCCTG CAGTTGGAAG      240
CTGGAACACA GGTCTCTGCA TGGCCCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:1148:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

```

GGATTGGGGA GGGAGTGTGC GAATAGGTGT GGGTGACAGA CATCAAGTAC TTAACAGGGT      60
AATAGAATAT CACAAGGCAA GTGGAGGCAG GGCAGATCA CAGGACCACA GGACCAAGGC      120
AAAATTAAAA TTGCTAATGA AGTTTGGGC ACCATTGTCA TTGATAACAT CTTATCAGGA      180
GACAGGGTTT GAGAGCAACC GGTCTGACCA AAATTTATTA GCGGGGAATT TCCTCCTCCT      240
AATAAGCCTG GGAGCGCTAT GGGAGACTGG AGTTTATTTC ATCTCTGCCT GCCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1149:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 332 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

```

GAATTCGGCC TTCATGGCCT ACGGCATTTC AGCGTCAAGT GCACTTAGCG GGGTACCCGG      60
CTCCCCCAGC CCCCACACCC GTCCTGGGTC TCAGGGTGGT TCCAGCTTCT CCTTGGGCAG      120
CCAGAAGTTG GAGTCCCATC CCCCANNGNA NATTTTTTTT TTTTTTTTTT TGTGATCAGG      180
GAGTGTGTCC AACGTAGCCC CCTGGCCTGT GCAAGCCCTG ACTCCCTCAT GGTGCCTCGG      240
AGAGTGGGGA GCATATTGGG CTGGGGTAAG CACTAGACCC AAGTAGACTG GACACAAAGG      300
GCTCGCCCGG GGCCCTGGCG CCACCCCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1150:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

```

GCGAGGCAGG GAAACTCACT TCACGTCTCT TTCCTGTAG AGCATCATGC TTATTTCTGG      60
CTCACTCACA TCTTTGTCTC GGGAGTTCTC TGCCGAGCCA TTGCCCCCTA CAGCAGAGAG      120
CACAGCTGGC TGCACTAGTG CTGAAGGAGC CAGCCCCAGA GCAGGGCATT TCCAGGGGCT      180

```

CTTGTCCCAG AGCGGCAGGC GTTGTGTGCA GAGAACGCCC CTCCCACGCA GCACAGAGAA	240
CGCGGGGTGG GTGTGTGGCT CCGGGCCTGT GGGGCTTAGG CTGCCTGAAC CACCGCCGAC	300
TGGCACCATG ACTCGGCATT CCTGGAAGTG CCTTACCAAG TTGTTGTGTG TGTTTTGTG	360
TTTTTTAAGA GACGGGCTTG CTCTATCATC CAGGCTCGAG	400

(2) INFORMATION FOR SEQ ID NO:1151:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC TTCATGGCCT ACCCAGACAA ATACCAAGTT TATTTACAA AACTAGGAA	60
GATGGGTTGA GGGTGGAGGT GGGGACACA GGTGCGCAGC TGCACAGAGT CAGCAGCAGC	120
AGCCTGCTCC CCGCACTGAG GACTCGGCCT GGANTGCAGT GCCTCCAAAT CAACACGCAG	180
CAAGAGGGGA GTGCAGGGAG GGCCCTGAAC ACCAAGCCTC TGAAAGGCTA AGGGACACAG	240
CTCCAGCTGT CCCAGGAAAA CCAGCAATAA ATAAAAGTGA GGCACGGCCC CACCCACACA	300
TATCATCTAG TCACCCATCT TCACTCTGG	329

(2) INFORMATION FOR SEQ ID NO:1152:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 313 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC TTCATGGCCT ACCCATAGCC ATGAGCATGA CTGGCTGCCA GCTCTTAGTC	60
ACCAAATGCC ATTCTCGCT GAAAGAAGCA AGGGCTTTTC AGAGAATAGA CTGAGCACAA	120
AAATGACAAT GGTAAATGGAG TAGAACACCT TGACTTTTAA AAGTCCACGA GTCCACAGTG	180
ATGCCTAAGG GAAGTAGGGA GGAAAGCTCT TCTTTACAAC ATCTTCCAGC TAACAGATGG	240
AAAAGGAATG ACAAATGAA AAATCACCAT ATTGCAACTC TCAATAAAGT AACTGATTCA	300
GGCATATCTC GAG	313

(2) INFORMATION FOR SEQ ID NO:1153:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GGGCTCCTCG CCAAGGAACT CGTGGCAGAA GAGGGCAGCA GTTGGCAGTA GCTGCCGATG	60
TCTGTCCCCA GCTCCACCAT TCCTCCCTGT GGCTGTGCCG TGCTCGTGGT TTCAGTGTCC	120
GTGTGTCCAT GTGTCTGCCC TTCAGGAGCT CGCAGCTGGT GTGCTTGGCG GTCCCAGGCC	180
TGTGTAGTGT CTCTCCCCTG CTGCGGGCGC CCCACCCCG ATTCCTCTCC CCAGAAGCGG	240

TGGGATGGGC CCCCATGAAC TGCAGCAGCA TGCTGAGGTG TCCATGTTGT CTGCCTTTGT 300
ATAAAGAAAC AGCCTCTACT CGAG 324

(2) INFORMATION FOR SEQ ID NO:1154:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 327 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GCGAGTTCAG CGGAGAAAAG AAAAAGCAAC GTTTAATTCT AGAAGGCCTC CTGTCCCTGC 60
 CTGCTCTGGG TGCTCATGGA ATCAGCTGCT GCCCTGCACT TCTCCCGGCC AGCCTCCCTC 120
 CTCCTCTCC TCCTCAGCCT GTGTGCACTG GTCTCAGCCC AGTTTATTGT CGTGGGGCCC 180
 ACTGATCCCA TCTTGCCAC GGTGAGAGAA AACACTACGT TACGCTGCCA TCTGTCACCT 240
 GAGAAAAATG CTGAGGACAT GGAGGTGCGG TGGTTCCGGT CTCAGTTCTC CCCCAGCTG 300
 TTTGTGTATA AAGGTGGCGC ACTCGAG 327

(2) INFORMATION FOR SEQ ID NO:1155:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 504 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTGCGCC TTCATGGCCT ACGAGCCCTT TGCCTCCAGT AGTCCCACCT TTCTGGA CTG 60
 AACTGATATT CACCTTACAC AAATGGATTG ATGTCTCATG TCTCCCTAAA ATGTACAAAA 120
 CCAAGCTGTG CCCCAACCAC TTGGGCACAT GTCATCAGAC CTTCTGAGGC TGTGTCACGG 180
 GTGCACGTCC TCAACCTTGG CAAAAATAAC TTTCTAAGTT ATCTGAGACC TGTCTCAGAT 240
 TTTTGGGGTT CACACACCAT ATGTCTGAAT ACTGTCTTTT CCTATCTCTG GCTCCATCCC 300
 ACATTGTAAG GGGCCTTGCA CACACAAATG TGGACATTCC AGCCTGCACA CCTAAGCATC 360
 GCCTCCACTC CCACCTTCC AGCGGATGGG TGTGAAAAC TGGCAGTGTTG TTCATCTTCA 420
 AGATGATGTA TACAGGAAAG TGGTCCAGGC AGATCCTGTG AGCAGGCTTG GGCCCACTTG 480
 GGAAGAGTAA CCCAGGATCT CGAG 504

(2) INFORMATION FOR SEQ ID NO:1156:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 686 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GNNNNNNNNN NNNNNNNNNN TTCCCCCTTN TNNCATGTTT TGTTCCCTTN TCCTTGTTTN 60
 TTTTTCGGC AAAATATTTC AAGNTATACC CAGGCAACAT NAANTCCAGT TCGGATTTTA 120
 ATTAGTCGAG TATGCAGCGT CTTTTCATTT TTATTACTCA AAAAAGTTTC ATTTTTTTAT 180

```

TTAGCTTTCT GACTCTGTGC TTGTGCCTTC AACACTTTCA CAACGATTTT CTGCTCCTCG      240
ATAAGGAAAG CACGCTTGAT CCTGTCACGA ACACATTTAG CACACATGGA ACCACCATAG      300
GCCCTGCTGA CATGTTTCTT TGTTTTGGAC AATCTCATAA GAACTTTAGG TCTTACAGCA      360
CGAACCCCTC GAAGTCTGCC TGGGCACACA CCACATGCAG ATTTTGGTGC TTTCCCAACC      420
TTCTTGGTAT AAAGGTAAAC AATTCTATTA CCAGGGGTTC GGGACAGCCT AGTTTGTGTA      480
GAGGCTGTAT TGAGGAAAG CCTACGTCGG TATGTCAAAC GCTGGACCAT TCTGAGTGCC      540
TGCAGACAAC CAAGGGTGAC TATAATGACA GCGTGCAAGT TGTGGACTGT GGAATAAGTC      600
TGAATGATAC TGCTTTTGAG AAAATGATCA TTTCAGAATT AGTGCACAAC AACTTACGGG      660
GCAGCAGCAA GACTCACAAC CTCGAG                                           686

```

(2) INFORMATION FOR SEQ ID NO:1157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

```

GCAATTGCT TTTTAAAAA TACATTTTCA TACACTAAGT TTTCTGTTAG CCTAAGTAAT      60
TATATTTCTA ATTAAGTTCA AAGTAATTGA TAGGTGGCAA AGGATATCAA TCAAAACCAG      120
TCCAAGTAAA AAATGTACAC TAATTTAATA ACAATATAT TCTATATTAC TTTTTTTTTT      180
TTTTTTTGAC ACAGGAGTTT CACTCTTCTT GCCCAGGCTG GAGTGCAGTG GCACGTCTCG      240
GCTCACTGCA ACCTCCACGC CCCCAGACT CGAG                                           274

```

(2) INFORMATION FOR SEQ ID NO:1158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

```

GAAGATGGAC AACCGGGATG TTGCAGGAAA GGCTAACCGG TGGTTTGGGG TTGCTCCCCC      60
TAAATCTGGA AAAATGAACA TGAACATCCT TCACCAGGAA GAGCTCATCG CTCAGAAGAA      120
ACGGGAAATT GAAGCCAAAA TGGAACAGAA AGCCAAGCAG AATCAGGTGG CCAGCCCTCA      180
GTCCCCACAT CTCGAG                                           196

```

(2) INFORMATION FOR SEQ ID NO:1159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

```

GAATTCGGCC TTCATGGCCT AGAGGTGAAA TACAGAAAGC CTTTTTTTCT TGATCTTTTC      60
CCGAGATTCA AATCTCCAAT TCCCATTGG GGGCAAGTTT TTTTCTTCAC CTTCAATATG      120

```

AGAATTCAGC GAACCTCGA G

141

(2) INFORMATION FOR SEQ ID NO:1160:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 355 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GAATTCGGCC TTCATGGCCT AGTAATATAT ATAATTTATA AGTAAATATA AATTAGGGAG	60
GTGTACTCAA CATTTTCATA GAATACATAG TCAAAAATGG TTTGCAACCT CTGCCTAACA	120
AAAATAAAAC ACCCTACATC TTTGGTTCAA GATTGTCACC CCCAACAGTT GTGTGAAATG	180
TGGGGCAGGA ATTATCACTA TTTTCCTTTG GAAATTAAGG TTCCAAAGAT AATGAGACCA	240
GAGCCAAAGG TCAGAGTCCA CTGTCTTCTC TCTGAGGCCT CAATGTGAAG ACCTGAAGCTG	300
TGGCAGCAGA TAATTCTGGA GACCTGTAA TCAGCTGTAT GCACCACAAC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1161:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

GTATTCATC ATATAATTTT CTTCGAATTG GGAATTTAGG CAGTATGTTA TGGGATTTTT	60
TTTTTAATTT ATTTTTTTTT TTTTATAGGAA GCTTGTCTTCT CTTTGTGCAAT TATAGAGAGC	120
ATGTTTATAT TAAAGAGTAC CTTCCATACT ATAGAACACA TTTGTGGGTG GATTCGGTCC	180
TTTTCTTCTT ACCCTCCCTG ATTGCTGCTA ACAATCCAGA AAGACAGAAA TTTTGTTTTC	240
ATTCAGGCAC ACTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1162:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 220 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

GAATTCGGCC TTCATGGCCT ACTGTTTCCT TGCCCTTTTC ACCGTCTGGT GGTTCCTTGC	60
AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC	120
TGTCATCACA TCGCCTTCTC TTGAGAAAGA TCCAGGCTG GTATTAAAT TGCCTGTTGG	180
CAGGAACTTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG	220

(2) INFORMATION FOR SEQ ID NO:1163:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```
GAATTCGGCC TTCATGGCCT AATCACTTGA GGTGAGGAGT TCATGACCAG CCTGGCCAAC      60
ATGTTGAAAC CCCATCTCTA CTAATAATAC AAAAATTAGC TGGGCATGGT GGGGGGCACC      120
TGTAATCCCA GCTGCTAGGG AGGCTGAGAC AGGAGAATCA CTTGAACCTG AAAGGTGGAG      180
GTTGCAGTGA GCGGAGATCG TGCCACTGCA GTCCAGCCTG GGTGACAGGG CAAGACTCCG      240
TCTCCAAAAA AAAATTAAAA ATAGAAATAC ATTTTAAAAC CCAGATACTT GTAGCATATA      300
TAAGGGACAA TTGCAGTTTG GAAGGTACTT CCACATGTAT TATATAATTT TATTTTAA      360
AATGAATCTC ATTTGGTTGT CATGAAATTT GGCAAGCTTC TCGAG                      405
```

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

```
GAATTCGGCC TTCATGGCCT AGCAGAAGCG AGAGGAGGAG GAGAAGAAAG CGGAGTTCGA      60
GCGGCAGCGA AAAATTCGAC AGCAAGAAAT AGAAGAAAAA CTCATCGAGG AAGAAACAGC      120
ACGAAGAGTA GAAGAATTGG TAGCAAAAAG GGTGGAGGAA GAACTGGAGA AAAGGAAGGA      180
TGAAATTGAA CGAGAAGTTC TCCGAAGGGT GGAGGAAGCC AAACGCATCA TGGAAAAGCA      240
GTTGCTCGAA GAACTCGAG                      259
```

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```
GAATTCGGCC TTCATGGCCT AAATTTCAGC AATACAGCTC TCACATACAT AAATTATAAA      60
ATAATTTTAT TTAAGGTGAT GAAATTTATA AGCAGGTTCA AAAATATAAT AAAA          114
```

(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

GAATTCGGCC TTCATGGCCT AGTCAGCAAC ACCCAACACT GTCTGTTTTC CATTGTGTGG	60
TTTTAATCAT AAAATTGTCA AGTGATTCGT GTTTGTACTT TATTTTTTTG TGCCTTCTGA	120
AAGGATCTAA AACAAAAATA TTTTGCCCTT TTTTCCCCAC GTGTATCTGA ACATTAAGCA	180
GATTGGCTCA GACACAATGA AAAGGATAAT CCAATGTACG TGCTGGTGCA CTCTGCTAGT	240
TGTTATCTCT GTAGGGCTCA GGAAGCTGGA AGGAGGAAGG GAGGGTAAGT GGCCTGGTGA	300
GTGGAGGTGG CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

GAATTCGGCC TTCATGGCCT AGGTACCAAT AATTCTTCA CTTCTTCAAC TGCTCTCTTC	60
AATTTGATTT CTGCTCTGTT CTGAGCATCT TCCACAGTGA TTAGTACATG TAAATCTTCA	120
TTTAGATGCT CCCAATTGGG CTGCGCTCTA TTTTGCTCCT CCTTTTTTTT ATCCCTCATT	180
GAGCCTTTGC CTCGGACCAT GATTTTACAT CCGGTTTCTG CTTCAAGTTG TTTGGCTGTA	240
AGTCCTCTAG GTCCAAGGAT TCTCCAACA AAATTAAACT TCGTCCAGCA GCCGCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

GAATTCGGCC TTCATGGCCT ACCTTCACAG AAAAATGCAT AGCTGGATGC TGCAGACTCT	60
AGCGTTTGCT GTAACATCTC TCGTCCTTTC GTGTGCAGAA ACCATCGATT ATTATGGGGA	120
AATCTGTGAC AATGCATGTC CTTGTGAGGA AAAGGACGGC ATTTTAACTG TGAGCTGTGA	180
AAACCGGGGG ATCATCAGTC TCTCTGAAAT TAGCCCCCCC GATCTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

GAATTCGGCC TTCATGGCCT AGTGCTGGGA GCGCAGCOGG CGGGCGAGGC TGCCTGGAAC	60
TGGAGCTGCT TGGAGCTGTC CGGCTGACCT GGAAAGTTCT TTGGCCTCTA GGCTTTACCT	120

GGAGGCCTCT TCCTTCAGCT CCTTGTTTT CCGCACCTCC TCGGCGTGCT TGTCTTCTC	180
TTGCAGCCGT TCCAACATGG CGGCGAGGTG GGCCTCCCTG TTCTCCTGT TGGATTCCAT	240
CTTCTGGGCC AGTTTTCTC TAGCCATCTT GATGAAGTTG TTGTTTTCTT CAATGGCCTT	300
TTGGATCACC TCTCTCTCAT GTTCCCGGAA TTCTAGACCT GCCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:1170:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 81 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

GGCTTTTTCC AAATTGCTCT GGCTACCATA TAGAAAATTG ACTGAAGGAG GGCCAAGATG	60
GAAACAGAGA GGACGCTCGA G	81

(2) INFORMATION FOR SEQ ID NO:1171:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 418 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

GAATTCTGAG GGAATACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTG	60
CATTGCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT	120
TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAACA	180
GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA	240
AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCACATG GACGACGATG ATGACGATGA	300
TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA	360
ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1172:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 431 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

GAAAACAGCA CTGCATGTCT TTGGCAAGCC ACAAGTTTCA TAGATACAGC TGTGCTCACT	60
GCAGAAAGCC TTTTCATAAG ATAGAAACAT TGTACCGACA TTGCCAAGAT GAGCATGACA	120
ATGAGATAAA GATTAAATAC TTCTGTGGGC TTGTGATCT TATCTTTAAT GTGGAAGAAG	180
CATTTTGTAG TCATTATGAG GAGCACCACA GCATAGATTA TGTATTTGTG TCAGAAAAAA	240
CTGAAACTTC AATTAAAACC GAAGATGATT TTCCAGTAAT AGAGACCACT AACCAGTTAA	300
CTTGTGGTTG CCGTGAGAGT TACATCTGTA AAGTCAACAG AAAAGAAGAT TATAGCAGAT	360
GTCTCCAAAT CATGCTGGAT AAAGGAAAAC TGTGTTTCG CTGCAGTTTA TGTTCGGCAA	420

CAGCACTCGA G

431

(2) INFORMATION FOR SEQ ID NO:1173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC TTCATGGCCT ACCCCTTAAA GGAAAGAATG GCTGCTCTAG AAGAAAAGAA	60
TGTTTTAATT CAAGAATCAG AAACCTTCAG AAAGAATCTT GAAGAATCTT TACATGATAA	120
GGAAAGATTA GCAGAAGAAA TTGAAAAGCT GAGATCTGAA CTTGACCAAT TGAAAATGAG	180
AACTGGCTCT TTAAT.GAAC CCACAATACC AAGAACTCAT CTAGACACCT CAGCTGAGTT	240
GCGGTACTCA GTGGGATCCC TAGTGGACAG CCAGTCTGAT TACAGAACAA CTAAAGTAAT	300
AAGAAAACCA AAACCTCGAG	319

(2) INFORMATION FOR SEQ ID NO:1174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAATTCGGCC TTCATGGCCT ACTTAATATA TTGTGAGAT AATTATTGAG ACATTTTATT	60
AATATTTTAT TTAGTCTTAG AATTCAGAG AAAAGTGAAC CTAGAGAGGT ACTTCTCCTG	120
GTTCAAACGT TGAACATGAA AATTCTGAAT TTAAGTAACT GGATCCTCGA G	171

(2) INFORMATION FOR SEQ ID NO:1175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCGGCC TTCATGGCCT AAGGAAACAA AAAGCTAAGG GCAAAATGTA CAACTTAGA	60
AGAAATTGGAA GATAGAAACA AGATAGAAAA TGAAAATATT GTCAAGAGTT TCAGATAGAA	120
AATGAAAAAC AAGCTAAGAC AAGTATTGGA GAAGTATAGA AGATAGAAAA ATATAAAGCC	180
AAAAATTGGA TAAATAGCA CTGAAAAAAT GAGGAAATTA TTGGTAACCA ATTTATTTTA	240
AAAGCCCATC AATTTAATTT CTGGTGGTGC AGAAGTTAGA AGGTAAAGCT TGAGAAGATG	300
AGGGTGTTTA CGTAGACCAG AACCAATTTA GAAGAATACT TGAAGCTAGA AGGGGAAGGA	360
CTCGAG	366

(2) INFORMATION FOR SEQ ID NO:1176:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 222 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```
GAATTCGCC TTCAGGCCTA CAAGAATTTT ATGCCATCCA AGAGTATTAG CACAAATAAA    60
TAAAGGCAAT TTGTAAATTT TTCCCTGAA AATCTAAAAA ACAAGAAAAC TATCTCTTCA    120
GGGTGATTAT AATTAGGTCT ATGAGACTCT CAAGGTCCCT TTAGTGATTG AGAATCTATA    180
GTTGGAAATA CTTATTTTAA AATGTTTCAAG CAGTTGCTCG AG                222
```

(2) INFORMATION FOR SEQ ID NO:1177:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```
GAATTGTCCA CAGCCTGTCA TGCCGCACAA CTGTCCACGC TCGGTTCTCT CGGATATCAC    60
AGTACACTAC AAATGGCTTC AGGGGGCCAC TGCCATCAGG ATCAATGGTG AAGTTTCCAG    120
AAGTTTTCCT ACTGAGCCGA TAAGCCTCAC AGGATTCCTT ATACAAAGGT GTGTGGCAGG    180
TCTCTCCCTT GTAGCCCGTC AGTTCGCAGT AGCAAATGAA GTCATCCCAA GACTGGTAGC    240
AGCGTCCATC ATGCTCACAC ATGTTAGGGC TGCACCTATC AGTGATGCCA CATGTATCAA    300
AGAGGACCTC AGCATAGAAT CCAAGCCGCC GGCCCTCCAC CAGAGTCAGG TTGACCAAGT    360
GACCGAG                367
```

(2) INFORMATION FOR SEQ ID NO:1178:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```
GAATTTAGAA CGGGTACAAA AGGACCTAAG CCAAACACAG TGTCAAATGA AGGAAATGGA    60
ACAAAAGTAT CAAAATGAAC AAGTTAAAGT GAATAAATAC ATTGGAAGC AGGAGTCTGT    120
AGAGGAGAGA TTGTCTCAAC TACAAAGTGA GAATATGTTG CTTGACAAC AACTGGATGA    180
TGCCACAAC AAGGCTGACA ATAAAGAGAA GACAGTGATT AATATCCAAG ACCAGTTTCA    240
TGCTATTGTG CAAAACTTC AAGCTGAGAG TGAAAAGCAA AGTCTTCTGC TAGAAGAAAG    300
AAATAAGGAG TTAATCAGTG AATGTAATCA CTTAAAAGAA AGACAGTATC AATATGAAAA    360
TCTCGAG                367
```

(2) INFORMATION FOR SEQ ID NO:1179:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

GAAACCGAAA GTGGAAATGT ACTCTGGGAG TGATGATGAT GATGATTTTA ACAAACCTTC	60
TAAAAAAGCT AAAGGGAAAAG CTCAAAAATC AAATAAGAAG TGGGATGGGT CAGAGGAGGA	120
TGAGGATAAC AGTAAAAAAA TTAAGAGCG TTCAAGAATA AATTCTTCTG GTGAAAGTGG	180
TGATGAATCA GATGAATTTT TGCAATCTAG AAAAGGACAG AAAAAAATC AGAAAAACAA	240
GCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 149 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

GAATTCGGCC TTCATGGCCT ACGAGTTCTT CATGCTTGTT GTTGAGATT GAGATGTTTA	60
TTGGTAACAT TGTCTTTTTT CCATCCTTTT TTTCTTTCC TAACCTGGTT TCTCCAGTG	120
CAACTGCAGA TAGAAGACCT GACCTCGAG	149

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

GAATTCGGCC TTCATGGCCT AGAAAATTAA ACTGTTTTTT AAACCAGGTG TTCACTTTTC	60
ATGATTTTT GCATAGTACT TGGTGAACCC TATTGATTTT TAGATTCAGG TAATTTTTCA	120
GTGTGAAAGA GTTTTTCTGT TATATCTTCA CTGTGATATC CATTCCATTC CCTTCTCAGT	180
TAATACTCAG TTAGCTCTA GTATCTGTCT CTCAAATTAT GTTTAATTGC TTTTATCACT	240
TTGTCCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

GAATTCTAGA CCTGCCTAGA GTGCTCTGTG TATGCGGATG ATTTAGAAATT GTCATTTCTC 60
 TTTACTGGAT GTTTATTTAT AAAGATCTGG CCTGTTCTCTG CGTCTGCGGA GCGGCCCTTG 120
 TCTCCAGCT ATCTATAACC TTAGCTAGAG TGTCGCCTTG TGGGTTCCCT CTCGAG 176

(2) INFORMATION FOR SEQ ID NO:1183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

GAATTTAGAA TTCTTGACGG GTTCTCGGGG GTTCCTGTTG TATAAAGGCC TTCATTACTT 60
 TAGTTATACC CAAGTGAAAG GGGCATTAC CTCGTGACAA GTGGATTATA GGAGAAAAG 120
 AGGAGATGGT AGGTCAGAGT GTGCTTAGAA GTCATGCCCA GTGTTCTCAT CAATGCCAGA 180
 CATTACGGGC TGCCCTTCCA TCAGCCATTG TACCTTTCTT CCTGCTAACA ATATCCCAAT 240
 TTTGTTGAGG TATCAGGCCA CTTAATATGT TTCAGGGAAA ACTGGTTCCA GCCCAGAGCA 300
 GTGTGGACCT TGATTACATC AAATAATCA TGGTGAGTCC ATTTTCCTTG CCAGAAATTC 360
 GTTTAGGAGT GGACATGTAT TTCATTGTG AGTACACAAG ACGACTCGAG 410

(2) INFORMATION FOR SEQ ID NO:1184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

GGAAACAGAC AGTACCAAGG AAGAAGCAGC TAAGATGGAA AAGGAATATG GAAGCTTGAA 60
 GGATTCCACA AAAGATGATA ACTCCAACCC AGGAGGAAAG ACAGATGAAC CCAAGGAAA 120
 AACAGAAGCC TATTTGGAAG CCATCAGAAA AAATATTGAA TGGTTGAAGA AACATGACAA 180
 AAAGGGAAAT AAAGAAGATT ATGACCTTTC AAAGATGAGA GACTTCATCA ATAAACAAGC 240
 TGATGCTTAT GTGGAGAAAG GCATCCTTGA CAAGGAAGGG CTCGAG 286

(2) INFORMATION FOR SEQ ID NO:1185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

GCGATTGAAT TCTAGACCTG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCCTCTG 60
 CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGATTGTG 120
 TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCCTCTG 180
 CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGCTGTG 240

TCCCAGCAGG	CTGAAGAGGG	CCTCACCTTA	CCCCAGGACT	CCGCTATGAC	ACGCCTCTG	300
CCCCTACAAG	ACACAGATCT	CTCGTCAGCC	CCAAAGCCTG	TGGCTGCAGC	CACGCTTGTC	360
TCCCAGCAGG	CTGAAGAGGG	CCTCACCTTA	CCCCAGGACT	CCGCTATGAC	ACTCGAG	417

(2) INFORMATION FOR SEQ ID NO:1186:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

GGAAGGGGCT	TTTACAACTT	CCTTTTGTTC	CCAGGCGTTA	GTATCTCTGC	TTGGTATAAG	60
ATACCAGTAT	TCCTAGGAAA	GGCCTTGAAA	AGAGGGACAG	ATACAAGCCT	CTTCTGAAAA	120
ATCTATGCTT	TTCTTACCTC	TACCAAGTAA	TAGCAAACAT	GAAAATGGTA	AAGATCTTTA	180
CAACATTGTG	CTCTGTACAT	ATAAACGTTT	TAAACACATG	CGCAAAGATG	GAGCAAAATA	240
TCATAGAAAA	TAATCTCGAG					260

(2) INFORMATION FOR SEQ ID NO:1187:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 337 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

GAATTCGGCC	TTCATGGCCT	ACAAGGAAAT	GCCCAAGGAA	AAACGTGAGC	TTCAGTTTCG	60
GCGAAAGGTC	TTAGCAGTCA	CAGACTCACC	TGCCAGGAAG	GGCAAGGACT	CTCCCTCTAA	120
GCAGAGCCCT	GGGGAGTCCA	CGAAGAAGCA	GGATGGCCTA	GTCCAGATTG	CACCAAACCT	180
GACTGTGATC	CAGTTCATTA	AAGTCTTCCC	CAGGGTGCTG	CTGCAGACCC	TAGGCCACCC	240
CATCTTCCTG	CTGGTGGTCC	TGTCCCAGGT	ATGCTTGTC	TCCATGGCTG	CGGGCATGGC	300
CACCTTCCTG	CCCAAGTTCC	TGGAGCGCCA	GCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:1188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 537 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

GAATTGGCCT	TCATGGCCTA	CGAGGCGTCA	CTGATCTTAA	CGAGACTTCC	AAATCGTCTC	60
AGCAGGGGCT	CCAGACTTCC	CCAGCAGGCG	GCAGGTTCCT	TGTCATGCTT	TCGCCTTCCT	120
TCTCATATAC	ACCAGTGCTA	GAGTTCATCA	TGTGTCAAAA	TTGTATCTTG	CTTCTTGTTT	180
TCAAGATGAT	CTAATAGTTG	TCTTATCTCA	GCATCATACT	CCACCCATTG	TGGGACAATT	240
CTGGCAGCAG	CTTTAGTTT	GGATTCTTTT	GTTTGGGAT	TATTGCACAG	ATCAATTGTT	300
TTGGCCCTCC	TTGGACTAAC	CACATACAAA	TATGAATCTG	GCTGCAAGAA	CAGGATATCC	360

AGGTAAGTAG AGAGTGGGCA TTGATAAAAA TATCTGGTGG AGAAGCCTAG GATTTCAACT	420
TTTTGTGAGA GGATTCCTGT TGGGACAGCT TTACCAGAAA AGAATAATAG CGGATATGTT	480
CATCCAAACT AAGAACTTTC ATGCATCTTG CATTGTTACA TAGCCTGTGG ACTCGAG	537

(2) INFORMATION FOR SEQ ID NO:1189:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 65 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

GAATTCGGCC TTCGTGGCCT AATTGAATTC TAGACCTGCC TCGAGGATTC AATTAGGCCA	60
TCGAG	65

(2) INFORMATION FOR SEQ ID NO:1190:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 398 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

GAATTCGGCT TCATGGCCTA ACTTTATGTC ATAAAACTGA TTTAAATAAT CTTGAAATGG	60
CCATTAAGGA AGATCAGATT GCAGATAACT TTCAAGGAAT ATCAGGTCCT AAAGAAGACA	120
GCACAAGTAT AAAAGGTAAT TCAGACCAGG ATTCTTTTCT TCATGAGAAT TCGTTACACC	180
AAGAAGAGAG TCAAAAAGAA AATATGCCTT GTGGGGAAAC AGCAGAATTT AAACAAAAGC	240
AAAGTGTAA CAAAGGAAAA CAAGGAAAGG AGCAAAATCA GGACTCACAG ACAGAGGCAG	300
AAGAGCTACG CAAACTTTGG AAAACCCATA CTATGCAACA AACTAAACAG CAAAGGGAAA	360
ATATTCAACA AGTGTCAACA AAAGAAGCTA AACTCGAG	398

(2) INFORMATION FOR SEQ ID NO:1191:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTCGGCC TTCATGGCCT AGCCATTGTT TATACATTAT TGCTGTCAGT ATTCACCAAG	60
ATGGTGCTAT TACCTGTTGT GGGGCAATTT TCCTTGTCAT TTCTACATAT CTTGGAACAG	120
CTTTTGCTT TATATTTTCA AGAATGTTCT AAAGCAGACA GCCTTGGAGG AGAGACAGAT	180
AGTGAATCCC TCCAGGGAAA AAGTCGATT TGTGTGCTCC CCTGCCTCGA G	231

(2) INFORMATION FOR SEQ ID NO:1192:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

```
GAATTCGGCC TTCATGGCCT AACTAACCG CAGCATGGCG GATCTGAAGC ACAGCAGCTT    60
GCGGTACGAG CTCCGAGCAG ATCTGGAGGA AGAAAGAATG CGGCAGAAAA TAGCAGAAAG    120
GACCTCAGAA GAAACAATAC GCATTACTC TTTGAGACTG TTTTGAACT GTATTGTTCT    180
GGCTGTTTGA GGGGCATGCT TTTATGCAAT ATACGTAGCA ACTGTCTTCT CGCAAGAGCA    240
CATGAAAAAG GAAATCCTCG AG                                     262
```

(2) INFORMATION FOR SEQ ID NO:1193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

```
GAATTCGGCC TTCATGGCCT AGAGGAAATT GCTAATGTAA CAGAGACATC AGATCCAGAA    60
TTCCAACGAA CCTGAATGAG CCCTGGTGTG GAACAGCCGT GAGCCTGTCC ACGTTTTTCT    120
CCTGATCTCT GCTTTTCATT AGTAATGAAT TTCCACTCCT TCTCCCTTT CATGACAAAT    180
CAGTACAGTG AATGTAATTG CCACATCCAG CGATGCATCA TCTTCCCACT TTTCTAGGCT    240
GCAGAGAAGG AAGCAGCCCT TGTGCAGCAA GAAGAAGAA AGGCTGAACA ACGGAAAAGA    300
GCTCGGGCTG AGAAGAAAGC GTTAAAAAAG AAGAAAAAGA TCAGAGGCCC AGAGAAGCGC    360
GGAGCAGATG ATGGACTCGA G                                     381
```

(2) INFORMATION FOR SEQ ID NO:1194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

```
GCGATTGAAT TCTAGACCTG CCTCTCTTAC CCTTGGCTTA CTAATATATT CTTAGTGGCA    60
TTTCATTG TGGTACTGGT GCGCATTCA AACAGGACAC TTGTATCTGA GTGAGCAGCT    120
GGAGCAGTAA GAATGACAAC ACTTGGTCTC TGCAGATTGG CTGGACCCAC CACTCTGGTG    180
CTAGTGCTGG CTTGGTGGCT GAGGGAACAA GCAGGAAGTA GAAGAGGAAA TGAGATGTGG    240
GTGGAGTGGG AAGAGAGGAC AGATTGGGGA GGGGAGGGAA AGTGCAAACG CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:1195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

```

GCGATTGAAG TCATTGCCAC GCCTACTAGT TTGCACTAAA GGAAAGTCAG TTTGGTATGA      60
ATTACAATGG CCAACGTTAC ATTCTCCTCC GTTTGTTTTT TTTTNTTAA TCTCAATTTC      120
TCTTACTTTT CTTATTCCCC CTATGCTGAT GCCAATCAGT TTCTTTTGGG AAAGTTTAA      180
CAGATCGGTT TTATGTTTTG AAGTACAGCA AGTATTTTCAT CCTCTCTTA AAATACAAA      240
CCCAGAAACC CAGGAGCTCG AG                                         262

```

(2) INFORMATION FOR SEQ ID NO:1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

```

GAATTCGGCT TCATGGCCTA GACCGTCTCA AAGAAAACAC ATATACCTTT TGCTCAGATT      60
ATTGTTAAAT TTTACCTCAT TTACTTTATC AATTGCTCTT TCTCTATTTA TGTGTATCAG      120
ATTATTGTTA AATGTTACCT TATTTGCCTT ATCAATTGCT CTCTTTATGT ATGTTTGTGT      180
GTACTGTTGC ACATGCAAAT GCACACAAAT ATATGTTTCT GAATTTTTTG AGAGTAGATT      240
GCATACATTA TGGGACCTGC CTCGAG                                         266

```

(2) INFORMATION FOR SEQ ID NO:1197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

```

GAATTCGGCC TTCATGGCCT AAGAAACACT TTTAAAAATC TTTCACTAGT TATTTTGTAC      60
ATAGATAAGA TAGTTGATTC CCAGCTTTTA TCTGTAAAGT TGTCAATAT GGAATTAAC      120
TCGGTGATTC TGTTGTATAA AACATTGTTA TATTTTtagg TGTGTGCGGA TTTTAGGCAA      180
ACAAGAAAAT ATTAGAGTGA TGCAATTGGC TTTGTTCCAG GGGATGCTCG AG                                         232

```

(2) INFORMATION FOR SEQ ID NO:1198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

```

GACCTTTACC ACTAAGTGGA GCCAACTTTA GCACCTTGCT AATGAATCTG GGTCTGAGA      60
ATTGTGCAAC ACTGCTGCTC TTTGTTTTAC TTGAGAGTAA AATTCTGCTG CATTCTCTTA      120
GGCCAGCTGT CTTGACTGGG GTAGCTGAAG CTGTTGTAGC TATGATCTTT CCATTTCAGT      180
GGCAATGCCC ATATATTCCC CTTGTCTCTC TTCACTGGC TGCAGTGCTT AGTGCACCTT      240
TACCATTAT  AGTTGGAGTT GACTCAAGGT ATTTTGATCT TCATGACCCA CCAAGGCTCG      300
AG                                                                                   302

```

(2) INFORMATION FOR SEQ ID NO:1199:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

```

GCCACTGCTC CTGCCAGGA CTCTCTTATT AGGTTTGACA TTTCAAGAGT TTAGAAATTA      60
CCTTCCAGAA TTCACAGGTA AAAGCCAGAC CTCTCCTTGG TGAAGATACA ATTCTTTACA      120
ATTTTACAAT AGTTAAGTAT ATTTTATCAG TCTATATTGG CTGTTTAGTT GACAAACCGT      180
TAAAAATTGG TGACAGTCCA GATGTGGTCA CTCATGCCTC TAATCCTCGA G                231

```

(2) INFORMATION FOR SEQ ID NO:1200:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 235 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

```

GAATTCTAGG CCTGACCCAG CCCCATGGC TTCAGAAGAG CTACAGAAAG ATCTAGAAGA      60
GGTAAAGGTG TTGCTGGAAA AGGCTACTAG GAAAAGAGTA CGTGATGCCC TTACAGCTGA      120
AAAATCCAAG ATTGAGACAG AAATCAAGAA CAAGATGCAA CAGAAATCAC AGAAGAAAGC      180
AGAACTTCTT GATAATGAAA AACCAGCTGC TGTGGTTGCT CCCATCACTC TCGAG          235

```

(2) INFORMATION FOR SEQ ID NO:1201:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 119 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

```

GAATGAGAGG TCAGAGTATT CCATTGCACA CGCACCTTGG GGCTGACAGA CTTGTGCCCC      60
CTAGCCTTCA TGCATGCCCA AGCACTGGCA GCTTTGCAGC CCTGCCCCA CGACTCGAG      119

```

(2) INFORMATION FOR SEQ ID NO:1202:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 366 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

GATTGAATTC TAGACCTGCC TCGAGATTCT TTGAGCACTT TCCCCCATCC CCAGGGCCAC	60
AGATCCCCTT CCTACTTGT TGGGGGGAGG TCTGGAGCAC CTCGCCAATG CCCTTCCCCC	120
ATCCGGCTGG GTCCTTCCAG TTATTTATTT GTGTATTAT TTATTTATCT ATTTATTATT	180
CTATTTAATC TCTTGGCCTC ACCCAGGGAC CGTCTGGCTT CCCCAGCTGG ACTGGGAGGT	240
CAGGAAGCCA GGCAAGGAGA GGGACAGCAC AGGCCACAGA GGGCTGCCCC CACCACACAC	300
ACCCCGCGCT CTCGGGAGAA ACCCACCTC TTCAGAGCCT GCACTCGCTA AGGAAGGGGA	360
CTCGAG	366

(2) INFORMATION FOR SEQ ID NO:1203:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 342 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

GGTGAGATGG AAAAGGAGTT TCCTGAGCTT ATCCGAAGTG TTGGTTTACT TACGGTAGCT	60
GCTGACTCTA TCTCTACCAA TGGCAGTGAA GCAGTTACTG AGGAGGTATC TCAAGTATCT	120
CTCTCAGTAG ACGACAAAGG TGGATGTGAG GAAGACAATG CTTCTGCAGT CGAAGAGCAA	180
CCAGGCTTAA CACTGGGGGT GTCATCATCT TCAGGAGAAG CTCTGACAAA TGCTGTTCAA	240
CCCTCCTCTG AGACTGTGCA GCAAGAATCC AGTTCCTCT CCCATCATGA TGCAAGAAT	300
CAGCAGCCTG TTCCTTGTA AAATGCAACC CCCAAACTCG AG	342

(2) INFORMATION FOR SEQ ID NO:1204:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 645 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCT TCATGGCCTA CGTCTTTCTA ACTATCTATG GGGTGGAGCT GTTCCTGAAG	60
GTTGCCGGCC TGGGCCCTGT GGAGTACTTG TCTCCGGAT GGAAGTTGTT TGAAGTTCTC	120
GTGACAGTGT TCGCCTTCCT GGGACTGCTG GCGCTGGCCC TCAACATGGA GCCCTTCTAT	180
TTCATCGTGG TCCTGCGCCC CCTCCAGCTG CTGAGGTTGT TTAAGTTGAA GGAGCGCTAC	240
CGCAACGTGC TGGACACCAT GTTCGAGCTG CTGCCCCGGA TGGCCAGCCT GGGCCTCACC	300
CTGCTCATCT TTTACTACTC CTTGCGCATC GTGGGCATGG AGTTCTTCTG CGGGATCGTC	360
TTCCCAACT GCTGCAACAC GAGTACAGTG GCAGATGCCT ACCGCTGGCG CAACCACACC	420
GTGGGCAACA GGACCGTGGT GGAGGAAGGC TACTATTATC TCAATAATT TGACAACATC	480
CTCAACAGCT TTGTGACCCT GTTTGAGCTC ACAGTTGTCA ACAACTGGTA CATCATCATG	540
GAAGGCGTCA CCTCTCAGAC CTCCCACTGG AGCCGCCTCT ACTTCATGAC CTTTACATT	600
GTGACCATGG TGGTGATGAC GATCATTGTC GCCTTTATCC TCGAG	645

(2) INFORMATION FOR SEQ ID NO:1205:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 336 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

```
GAATTCGGCC TTCATGGCCT ACAGTACACA AGTGCTAGCC CTAGCAGCTC GCGATGTGCT    60
TCAGCAGAGC AGACGCTGCG GATAACTACC CTTTGGGAAC ATGTCAACAG AGGAAACTTT    120
TTCCTCACTT CCATCCCCCG AATTGTGATT GGAACAAGTT TGTCCCTCTT AGGGGATCAC    180
CCCACAGAGG GCCTGGGTGT TATTTTTCAG ATGGATATGG CTGGGCATAC GACTTATCTA    240
AGATCCCAAC CAGTATAAAA GGATATACTT TGGGAGCCAG AACAGCTGTG AGGTTTAAGC    300
CAATACAGAA GGAAATGACA CCTCATGCAG GCAGGT                                336
```

(2) INFORMATION FOR SEQ ID NO:1206:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

```
GGAAAATCTG AACAAACAAC CGAATAAGCA GTGAAGAAA TCACAAACAT CTACAAATCC    60
AAAAGCTGCT CTCAAGTCTA AGATAGTTGC TGAATTTTGA TCTCAGGCCC TAATTGAAGA    120
GCTGTGCTA TACAAGCGCT CAGAAGATCA GATAGAACTG AAGGAAAAGC AGTTGTCAAC    180
TATGAGGGTG GATGTGTGCA GCACAGAAAC TCTCAAATGC TTAAAAGATA AAACAGGTGG    240
GAAGAAGTTC TCCAAAGAAT TTGAAGAGGC AAGCTCCAAG CTGGAAGAAT TTGTGAATGG    300
ATCACTCGA                                309
```

(2) INFORMATION FOR SEQ ID NO:1207:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 341 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```
GAATTCGGCC TTCATGGCCT ACAGCTTTTG AGCGGAAACC TGAAAGAAGG TTTGCAGTAT    60
CTTCAGAGTC TGAATTTTGA GCGGATAGTG ATGAGCCAGC TAAATCCCCT GAAGATTGTC    120
CTGCCCTCAG TGGTTAACTT TTTTGCTGCA ATCACAATA AGTACCAGCT CGTCTTCTGC    180
TACACCATCA TTGAGAGGAA CAATCGCCAG ATGCTGCCAG TCATTAGGAG TACCGCTGGA    240
GGAGACTCAG TGCAGATCTG CACAAACCCG CTGGACACCT TCTTCCCCTT TGATCCCTGT    300
GTGCTGAAGA GGTAGGTACT TTTAAACGTT GACATCTCGA G                                341
```

(2) INFORMATION FOR SEQ ID NO:1208:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 588 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

GAATTCGGCC	TTCATGGCCT	ANCGAGCGGC	AGGTGTGCAC	AGAGGTNCTC	CACTTTGTNT	60
TCTGAACCTCG	CGGTCAGGAT	GGTTTTCTCT	GTCAGGCAGT	GTGGCCATGT	TGGCAGAACT	120
GAAGAAGTTT	TACTGACGTT	CAAGATATTC	CTTGTCATCA	TTTGTCTTCA	TGTCNTNCTG	180
GTAACATCCC	TGGAAGAAGA	TACTGATAAT	TCCAGTTTGT	CACCACCACC	TGCTAAATTA	240
TCTGTTGTCA	GTITTGCCCC	CTCCTCCAAT	GGTACTCCAG	AGGTTGAAAC	AACAAGCCTC	300
AATGATGTTA	CTTTAAGCTT	ACTCCCTTCA	AACGAAACAG	AAAAAACTAA	AATCACTATA	360
GTAAAAACCT	TCAATGCATC	AGGCGTCAAA	CCCCAGAGAA	ATATCTGCAA	TTTGTCTATCT	420
ATTGCAATG	ACTCAGCATT	TTTGAAGGT	GAGATCATGT	TTCAATATGA	TAAAGAAAGC	480
ACTGTTCCCC	AGAATCAACA	TATAACGAAT	GGCACCTTAA	CTGGAGTCCT	GTCTCTAAGT	540
GAATTAAAC	GCTCAGAGCT	CAACAAAACC	CTGCAAACCC	TACTCGAG		588

(2) INFORMATION FOR SEQ ID NO:1209:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

GAATTCGGCC	TTCATGGCCT	ACAAGGATAG	AATTCATTCC	ACCTATATGT	ACTTAGCAGG	60
GAGTATTGGT	TTAACAGCTT	TGTCTGCCAT	AGCAATCAGC	AGAACGCCTG	TTCTCATGAA	120
CTTCATGATG	AGAGGCTCTT	GGGTGACAAT	TGGTGTGACC	TTTGACGCCA	TGGTTGGAGC	180
TGGAATGCTG	GTACGATCAA	TACCATATGA	CCAGAGCCCA	GGCCCAAAGC	ATCTTGCTTG	240
GTTGCTACAT	TCTGGTGTGA	TGGGTGCAGT	GGTGGCTCCT	CTGACAATAT	TAGGGGGTCC	300
TCTTCTCATC	AGAGCTGCAT	GGTACACAGC	TGGCATTGTG	GGAGGCCTCT	CCACTGTGGC	360
CATGTGTGCG	CCAGTGAAA	AGTTTCTGAA	CATGGGTGCA	CCCCAGGGAG	TGCTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1210:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

GAATTCGGCC	TTCATGGCCT	AGGTTGCAAC	TGCCACGCAG	CAACTGCCAC	GCAGAAAAAG	60
GAGGGGTGTA	AAAGGGAGTA	GCTTCTGATA	TTCAGAAAGCT	ATTGGAAGAG	ATGCTCAAAG	120
AAGAAAAAAT	TACCATAATC	CAATAAAGAA	GAAGACCTGA	GATCCAGGAA	GCAGATGATC	180
TGAACTGCAG	AGAAAGTTCA	GGAAAGTTCC	CTCATTTCATG	ATGATGGGAA	ATAACAGTAA	240
ATTCTGTACA	GCAGTCTTGG	ACAACAACCA	ATCTAAACTG	GCACAGTGCA	GAGGCAATCA	300
ACAGAGAACA	TAATATTGAT	AGAATGCCTG	ACGCTTTTGA	TTGTATTAC	AGGAAACATA	360

AACAAATTGGA AAACCTCGAG

379

(2) INFORMATION FOR SEQ ID NO:1211:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 380 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```

GAATTCGGCC TTCATGGCCT AGAAACAGGG TATTATTTAT CCTCTTAGCA TATGTTTTGT      60
AATGATTCTG TTACATCAGA GCTTCTGTTG ATGAGTGCCA CTAAAGTGAG ATTGTTGATG      120
AGGATTGGCC TTATTTTTTT GTGGTTCTAT TCAATACTTG CCACAGCATT TATTTTCTAA      180
AACATTTCTA CGGTCTATAC TTATCAGTGT CTGATCACAT GCAGGCACTG GTCAGGTGG      240
AGCATGGTCG AGGCGTTCTT ACTGATACAA ACTCGTGCCT TCTCTTGGAC ACAAGGAGCC      300
CATGTTCTGG TTAACCTCTG GTTCATTTAT TTCACTTGTC ATGCATCGCC TCTATCTTCT      360
CCCTTTATTG CGTCCTCGAG                                     380

```

(2) INFORMATION FOR SEQ ID NO:1212:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

```

GAATTCGGCC TTCATGGCCT AGTGAAGGGT ATTGGTGGTG TTTTTTCCCC TTTACCTCTC      60
ATTTGGGCAT TTTAAATAG GAGGCCAACT TCATTTACTC CTGTTTAGTA AATCTAAATG      120
AGTGTAAGTT TTAAATTAGA TTTTTCCTCA AAACCTTCA GAAGGTCTAG TATTAGGGCA      180
GTTGATAAGT AAGTGAAGC ACCTTGGGCA GGACCCAGTG ACCTGTCCTT TTAATTATTA      240
CAGCACCTGC ACGGGAAGCA GATCTGGAGG ATGAAATTTA ACCTGTTACA GTGTGTGTAT      300
GTTTtagggt GTGTGTTTTC CGAATACTGT GGGGAGTTCC CTTTTTCCTT CTCCCATGAT      360
GGATTCTTTT GTCTTTCTAG AGATACCATA GGAGGATATC TGGATTTTTC ACCTAAGGCA      420
GTGTCTCGAG                                     430

```

(2) INFORMATION FOR SEQ ID NO:1213:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 437 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

```

CTCGAGTCTC TCCTGTTAAT CTCCTATTTA TAAAAGGATC ATGAGGCTGC CAAGTGCTAA      60
AAATGGAGAT GGTCTAGTAA CTAGAAAACCT CCCACCCCA GGGAGCACAC CTACGTATGT      120
CCCTACAACC TAATAATGTG ATGTGTTTTG GAACACAGAC ATTAGAACTT CATGAAGTTT      180
TAACTGTTGA TTCTTTCCTA AGCATCATCA AGTTATGATT TAGGCAATGT ATGATTGAAA      240

```

TGCATTCATT CATCACGCAT AGGCACAATC ACAGAAATAT TGCACAAAAT ATGTCCCTGA	300
CTGAAACTGA GAGGTACAAA AACGTATTTC ACTCTTCGTA AAGAAGTTTG TGAGGAAATA	360
CAACTCTGCG ATCGTATAGA CATGTTTCCT GATAATACAC TGACATTCAC AAACAGTAGG	420
CCATGAAGGC CGAATTC	437

(2) INFORMATION FOR SEQ ID NO:1214:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 295 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

GAATTCGGCC TTCATGGCCT AAAAAGAAAT GATGTTTTCT CTCCAACAGT GTGTTTTTAT	60
TTCTTTCATC TACCTGTCCA GTAATCATTT TAAAAAGAA AATAGCATTG GTTACTGCCT	120
GTGTGATGTG GCCCCGGCTT ATCTGCACTC TCCCTCCTGT TTACTGTTCC AGCCACCTCA	180
GCTTTTTCTC TGTTCTCTA GCATGGCAAG CTTATTCCTG CCTCATGACT CTTTCGCATG	240
GTGTTTTTCAG ATTTTCTCTG TAGCACTCTG CACGCATTGT CCACCTAAAC TCGAG	295

(2) INFORMATION FOR SEQ ID NO:1215:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 265 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

GACCTGCCGC GAGTGTGTT GATAGCTTGC TCAAGATCAC ACAGCTAGTA GGTAGTGAGG	60
CTAGGATTTA GACTTAAGTA GTTGGTTGTA GAGTCCACGT GTTTAACCAT TACACTACTT	120
TGATAACAAT ATCATTATTA TTATTATCTT TTTTTTTTT TTGATACAAA GTCTCACTTT	180
GTTGCCCAGG CTGGAGTGCA GTGGCATAAT CATGGCTCAC TGCAGCCTCG AACTCCTGGG	240
CTCAAGGGAT CCCCCACTC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:1216:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

GAATTCGGCC TTCATGGCCT AAAAGAAGGA GCGCGAGAGA AAAAAGCGAG ATGAAGAAAA	60
AGCGAAACTG CGGAAGCTGA AAGAAAAAGA AGAGTTAGAA ACAGGTAAAA AGGATCAGAG	120
TAAACAAAAG GAATCTCAAA GGAAATTGTA AGAAGAAACT GTAAAATCCA AAGTGACTGT	180
TGATACTGGA GTAATTCCTG CCTCTGAAGA GAAAGCAGAG ACTCCACAG CTGCAGAAGA	240
TGACAATGAA GGAGACAAAA AGAAGAAAGA TAAGAAGAAA AAGAAAGGAG AAAAGGAAGA	300
AAAAGAGAAA GAGAAGAAAA AAGGACCTAG CAATGCCACT CGAG	344

(2) INFORMATION FOR SEQ ID NO:1217:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 371 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```

GAATTCGGCC TTCATGGCCT AGCCATTATT AAGACCTGTG ACAAAAACTA TAGACATGAT      60
GCAGTGAAGA TTCTGAAACT CAAGCCTGTG CTGCAGAGAA GTCTCACTCA CCCTCCTACC      120
ATAGCCCCAG AGGGGTCCAG ACCCCAGGGT GGTTCGCCA GCAGCAAGCT AGACAGTGGA      180
TTTGCCAAGA CATCTGTGTC TGCTTCTCTA TACCACACAC CCTCTGACTC CAAGGAAATT      240
ACTCTTACTG TTACTTCAAA GGACCTGAA AGACCTCCTG TTCATGACCA ACTTCAGGAC      300
CCACGACTGC TGAAGAGGAT GGCATTGAG GTCAAAGGAG GAATATTCCT TTGGGATCCA      360
CAACCCTCGA G                                     371

```

(2) INFORMATION FOR SEQ ID NO:1218:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```

GAATTCTAGA CTCCCGCGCG TACTCGGCCG CCTGAGCGAT ACTAAATGT CTGATGATGC      60
TGGTGACACC TTAGCCACTG GAGACAAAGC AGAAGTTACT GAGATGCCTA ATAGTGATTC      120
TTTACCTGAG GATGCAGAAG TGCATTGTGA TTCAGCTGCA GTTTCACATG AGCCAACACC      180
AGCTGACCCC AGAGGGGAGG GGCATGAAAA TGCAGCTGTG CAGGGTGCG GGGGTGCCGC      240
CATTGGGCCC CCTGTGCAGC CTCAGGATGC CAACGCCCTG GAGCCCCCTC TCAATGGAGA      300
CGTGA CTGACTGAG GATACACTTG CTGAATGTAT TGATTCCTGG AGCCTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:1219:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 392 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

```

GAATTCTAGA CCTGCCTCTC CTGTCACTTC CTTGTGTTT CTCTGTGACC GGCCTCTGTT      60
CCCACCACCC TTTTGGA ACT GCTGTCCTGA TGGTCACCAG TGCTTTCCTA ATAGCCAAAT      120
TCAGTGGCCT GTCCTCAAGC TCCCCGAAT TCTTTGGCCA CACAGATCAA CCTCTAAGTC      180
CTGGGAATC CCTCCTTTGT GATTTTGAGG CGCTGTGTGC TGCAGGCTCT GCTTTCCCT      240
CCCATCACCC CATGGTTCTT CCTTCTCCTC TGACCCCTCC CTCTTCCATT TCTCCACAG      300
CTCTGTCCAC AGCCACAATG TCCATAGGAG CCTGCCACAC CCTTTATCCA ACTGCAGCCT      360
CAACCCACCT GCAAAGGACC CCTGAACTCG AG                                     392

```


(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

```

GCAAGCTACT TCTTCAACAG CTGTATCTGC TTCAAAGCCG ACTGCCTCTC CTTCAAGCAT      60
TGCAGCAAAC AATTGTACTG TGAATACGTC ATCAATTGCA ACGTCTTCAA TGAAGGGTCT      120
TACGACTACA GGAAACTCGT CTCTTAATAG CACATCTAAC ACTAAAGTAT CAGCAGTGCC      180
TACAAATATG GCTGCCAAGA AAAACATCTA CCCCCAAAAT AAATTTTGTT GGTGGTAATA      240
AGCTGCAGTC NACAGGAAAT AAAGCAGGAG ACCTTAAAAG GGACCCGAAT GTGTTAAAAG      300
TAATCCTGTC ATTTCTGCTG TGCAGATTCC TGAAGTAAAG CAAGACACAG TGTGAGAACC      360
AGTCACACCT GCATCTCTTG CTGCTTTACA GAGTGATGTG CAGCCAGTGG GCCATGATTA      420
TGTGGAAGAG GTACGAAATG ATGAAGGAAA AGTAATTCGG TTCCATTGTA AATTATGCGA      480
GTGCAGCTTT AATGATCCCA ATGCTAAGGA GATGCACTTA AAAGGGCGAA GACACAGACT      540
TCAATATAAA AAAAAAGTAA ATCCAGATTT GCAAGTAGAA GTAAAGCCAA TACTCGAG      598

```

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

```

GAATTCGGCC TTCATGGCCT AGAGGAGTCC TGTCAGTTCG TTCTCTGCTG TGTCCCCAAG      60
ACCATGAATC ATGGCTGGCA TGTAGTAGGC ATTTAATAAT ATATGTTCAA CAAGTATTTG      120
GCAGTCTTGG AGGGCAGAAA AGGAGGTGGG GAAGATTTTT AAATAACATT TTTTAAAAAG      180
TCACATTGTC CTACAATACC GATTTTCTT GCATATTTAG GAAATTGAGG GTTTTTTTCT      240
AAAAATGCG GACATATGGG AAATAGGATG CAACATTTGC ACTAATGTTT CAGACACAGT      300
TAGAGTTTC CAAGAGATTT TCGCTGGGT CACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GCTCGAGTGA CATGGAACT GAGGTCTTAG AGACACGTGT AATGGAGAGG AGAGGAATGG      60
AGACCTGTGC GATGGAAACC AGAGGGATGG AAGCAAGGGG CATGGATGCA AGAGGATTGG      120
AGATGAGGGG CCTGTCCCC AGTTCAAGAG GCCCTATGAC TGGTGAATT CAGGGTCCTG      180
GTCCCATTA TATAGGGGCA GGTGGCCCTC CTCAGGGACC CAGACAGGTC CCAGGCATTT      240
CAGGGGTGG GAATCCTGGA GCTGGTATGC AGGGTACAGG CATAAAGGA ACAGGCATGC      300

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AGGGAGCAGG CATAACAAGGA GGAAAAATGC TCGAG

335

(2) INFORMATION FOR SEQ ID NO:1223:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 534 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

GAATTCGGCC	TTCATGGCCT	AGGTACAGAC	TGAACCCAGG	AACCCGGGTA	TCTGCGTCCT	60
GAGTCCCAGC	GCCCACCAGG	ACTGGGGCCT	CCTCACATCT	ACTCTGAGGA	CAGAATCTAT	120
TGGCAGAGTC	TTCCTTTTGG	TTTGGGATGC	TGGGTTTGAG	AACATGCCGG	GAACCAAGAG	180
TCGTGACTAA	TCCAATTTTG	AGCGCTTGAG	GACCAAGTGG	AAAGAACTC	AAGCAGATTT	240
AAAGTGACCA	ATGTCGTGGT	ATGCCCTTGA	GCCCCTGCAG	AAGCAAAACAA	TAATTTTGTG	300
TGTGTGTGGA	CAAATACATT	TGTATTCCAG	ATCTCACAGA	ATTCCTACA	CAAAGAAATT	360
TGCAAGGAAA	ATGGACATTG	CACCCTAAAA	ATTAACAAGG	AAAGAAGGTA	CCAGGAGCAA	420
CAACTCATT	ACAGGAACAG	AAACAATATT	GCAAATATTT	CAGATGCAAA	GTGTATCCGA	480
CTTATAATAC	AACTGTCCCT	ACTGTGTCTA	AAGAAATGAA	AGGCAATCCT	CGAG	534

(2) INFORMATION FOR SEQ ID NO:1224:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 354 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

TCACGAATGG	CCCACAGGGA	TCAGGAATGG	TATGATGCTG	AAATTGCCAG	AAAAGTCAA	60
GAAGAAGAAC	TTTTGGCTAC	CCAGGTGGAC	ATGAGAGCCG	CTCAAGTAGC	TCAAGATGAA	120
GAAATCGCTC	GACTTCTAAT	GGCTGAAGAA	AAGAAAGCTT	ACAAAAAGC	CAAGGAGCGG	180
GAGAAATCAT	CTTTGGACAA	AAGAAAGCAA	GACCCCGAGT	GGAAGCCAAA	AACAGCTAAA	240
GCAGCAAATT	CCAAGTCAAA	AGAGAGTGAT	GAACCTCACC	ATTCTAAGAA	TGAAAGGCCA	300
GCACGGCCAC	CACCACCTAT	CATGACAGAT	GGTGAAGATG	CGGATTCTCT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:1225:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 488 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

GCAACAAAAC	AAAACAAAAC	ACACTTATGG	TAACCCATTC	TGTTGAGGAG	TCCAAAACCTC	60
GAATAAAGCG	CCTCATTGCC	TTTAACTGGT	TCTGTGGCAG	TGAGATCATC	ATCCTTATGC	120
TGGCTCACCT	AGTGTCTCTC	TCTCTCTCCC	GTTTCTCTCT	TCCCTCTCTT	ATCCCCTTGA	180
CTCTCCCCAC	TTCTCATCTT	CTCTTTAGAT	TATGTGGTAG	CTATCCTCAA	GAGCTCATAG	240

TGCCTGCCTG GATCACTGAC AAAGAACTGG AAAGTGTATC AAGTTTCAGG TCCTGGAAGC	300
GCATCCCTGC CGTCATCTAC AGGCACCAGA GCAATGGAGC TGTCAATTGCC CGCTGTGGAC	360
AGCCAGAGGT TAGCTGGTGG GGCTGGCGAA ATGCAGATGA TGAGCATCTG GTACAGTCAG	420
TAGCCAAAGC TTGTGCCTCT GACTCCCGAT CGAGTGGCAG CAAGCTGTCA ACTAGGAAAC	480
GACTCGAG	488

(2) INFORMATION FOR SEQ ID NO:1226:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

GATCCCCACC AAAACAGGAA AAGAAGTGCT CTCGTGCAGG GCTTGTTCAC AGTGAGCCTG	60
GCTGGCTCCT CATGATCTCT GAGTTTAAAA TGTGCCAGCA GATGATTTTA ACGATCCCAT	120
CAAAAATTGT TGTCTGGATC AGTTTCGAGC TAGCGTTTCC TTGCAGAGGC CATTCTTCCT	180
TTTTTGACAA AAGTTGGGTC GGCCAGGTGC AGTGGCTCAT ACTTGTGATC CACCTGCCTT	240
GGCCTCCCAA AGTGCGGGGA TTCTAGGCAT GAGCCACCAC ACCCTGCCAG AAAAATGGAT	300
TTAAAAAGAG AATTACAAAG TACTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1227:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 527 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

GAATTCGGCC TTCATGGCCT AAAATTTTAA AAAAATATTT ATAATGATAG TTAGAGAACT	60
GTTTATATGA GGATCAGACA TTGTTTCAGC ACTGGATCTC CTCTGTCCCC TCTCTTGCTA	120
CAGCATACAG CCCAGAGACA CACATGTAAA AGTAGATGAT CTCTGTAAAC TTCAGCTGCA	180
TTTCTGTATG TGTAGGATTG TCCTANTATC AGATATCCTT TGAGAAAGAG TTGGAGAGGC	240
ATGGAAGGAA GCATATTCCT GACCTCCCCC CTTTTAGCT AAAGATACAA ATTCAGAGCT	300
GTTTGAAAAG GGCTTAGAAT AATATTAATT AACATATTC TATAATACAA AGAGAAGTAC	360
TTTTTTAAAA TACATTTATT TTTCTTTCTT TTTTAGCAGG CATTTCTGAC AGAAAATCTT	420
TAGGGCCAAT TAGAGTTTCT TTCTGACTTT TAATTGCCCT CTGCCTTTTG GGAAAGTGTT	480
GAAAAAAGCT CTGGAACAAA ATATGCTGGT CAAGGTCGCA ACTCGAG	527

(2) INFORMATION FOR SEQ ID NO:1228:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

```

GAATTCGGCC TTCATGGCCT AAGAAAACAG CCTAGAATTA AACCTCCAAG ATGAGTGTGA      60
GATGAAGCCT TTCCACCTAT CCCAACAAAGG TTAAAAAATA ATAAAAACTA GAATGGGGCT      120
ACTACACAAC AGCCCTTTGC CCCACCCAAG GCTCATTCCC TAGAGGCAAG TGTACGAGTT      180
TATTTCTCCT TGAAATTATT TCCATATCTC CAAATAGTGT TTATACCACT CAAGGCAGAG      240
ATAGCAATTT GCCTACCCAG TATACATTTT CCCTCGAG                                278

```

(2) INFORMATION FOR SEQ ID NO:1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

```

GAATTCGGCC TTCATGGCCT AGCCACCTTG AAGCTCTCAA ATATCACTGT TGTGAATACA      60
GAGAGGGAAA ACCAACTGTA ACGTGCCACC CAAATTTTTT CAGATTAATA CATCATTCAT      120
CAGACTTCAT TCGTGATCTC GAAGAGTGAC ATCAGTCTTC CTTGGAATAT GAAGAGAATT      180
TCTTTGGTTC TTCTTTTGCA TTTCTATTTG ATTTATTTTA TTTTATTTTA TTTTATGTTT      240
TTTGGTACAG AAAGCTCATT ACTAGTCCTG TCCAGCAACG TGCCTCTCCT GGCCCTAGAG      300
TTCTTGGAAG TAGCCAGGC CAAAGAGAAG GCCTTTCTCC CCATGGTCAG CCACACGTTT      360
CACATGCGCA CAGAGGAGTC TGATGCCTCA CAGGAGGGCG ATGACCTACC CAAGTCCTCA      420
GCAAACACCA GCCATCCCAA GCAGGATGAC AGCCCCAAGT CCTCAGAAGA AACCATCCAG      480
CCCAAGGAGG GTGACATCCC CAAGGCCCCA GAAGAAACCA TCCAATCCAA GAAGGAGGAC      540
CTCCCCAAGT CCTCGGAAAA AGCCATCCAG CCCAAAGAGA GTAACATCCC CAGAGCCCTC      600
GAG                                                                603

```

(2) INFORMATION FOR SEQ ID NO:1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

```

GAATTCGGCC TTCATGGCCT ACCGGGCAGT TAGGCCCCAAG CGCCGGGTTC AGGCCTCCAA      60
AAACCCCTG AAAATGCTGG CGGCAAGAGA AGATCTCCTT CAGGAATACA CTGAGCAGAG      120
ATTAAACGTT GCCTTCATGG AGTCAAAGCG GATGAAAGTA GAAAAGATGT CTTCCAACCTC      180
CAACTTCTCA GAAGTCACCC TGGCGGGTTT AGCCAGTAAA GAAAACCTCA GCAACGTCAG      240
CCTGCGGAGC GTCAACCTGA CGGAACAGAA CTCTAACAA ACAGCCGTGC CCTACAAGAG      300
GCTGATGCTG TTGCAGATTA AAGGAAGAAG ACATGTGCAG ACCAGGTG TGGAACCTCG      360
AG                                                                362

```

(2) INFORMATION FOR SEQ ID NO:1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

```

GAATTCGGCC TTCATGGCCT AGTCCCTGTT CAATTTCTCT CAGCCTCAAT ATCTTTTACT      60
TTAAACTAGG TAGGGTTACC AGTTCAATGA TCTGCTCATT AAATACTTAC TATACCTTAG      120
GTACTATATG AGAAGCTAGG AAAAGAGTGA TGAAAAGAC ACACCTAGAG AGGGCATTGG      180
ATTATTAAAT CAGCAGCTAC TGTAAAGGTA TTTAAGTTCT GTGACAGGCA GCATTCTGGG      240
TATCACAGGA ACATCTTACA AGAATTTCTA ACTTCAGGAG GAGGGTTCAG AGAATTAGCC      300
AGGCCAGGGG TGAGAGTGTT CTTCCCGGAA GAGGGAACAA TGAAGACCCA GGAGGAGATA      360
CAGAGTATCT CGCTGTATT AAAATAACCA GAAATAGATT TATATATTTA GTACAGAGGC      420
TGAGGGGAAG AGAAGTGAGT GTGAGAAGAT CAAAAGGAGA AGCTCGAG                      468

```

(2) INFORMATION FOR SEQ ID NO:1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

```

GAATTCGGCC TTCATGGCCT ACAATCATCT CAAACAGTTC CGGGTTGCTG CCCTTTTGGC      60
TTTCCTAGGT GCTACAGTAG CAGGCTGTTT TCCCCTTTTC CATAGAGGGG AATATTCTGC      120
ATCACCCCTT TGTTTGCCAT TTCCTACAGG TGAAACGCCA TCATTAGGAT TCACTGTAAC      180
GTTAGTGCTA TTAAACTCAC TAGCATTTT ATTAATGGCC GTTATCTACA CTAAGCTATA      240
CTGCAACTTG GAAAAGAGG ACCTCTCAGA AACTCACAA TCTAGCATGA TTAAGCATGT      300
CGCTTGGCTA ATCTTCACCA ATTGCATCTT TTTCTGCCCT GTGGCGTTTT TTTCAATTGC      360
ACCATTGATC ACTGCAATCT CTATCAGCCC CCCACTCGAG                      400

```

(2) INFORMATION FOR SEQ ID NO:1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

```

GAATTCGGCC TTCATGGCCT AGGATATAGA CCAAACCCAA ATCTGTGTTG ACAAGGGATT      60
AGACCCACCTA TGGCTGGATG CAACAGTTCT GTAGGCGGCA TGAGTATGTC GCCAAACCAA      120
GGCTTACAGA TGCCGAGCAG CAGGGCCTAT GGCTTGGCAG ACCCTAGCAC CACAGGGCAG      180
ATGAGTGQAG CTAGGTATGG GGGTCCAGT AACATAGCTT CATTGACCCC TGGGCCAGGC      240
ATGCAATCAC CATCTTCCTA CCAGAACAAC AACTATGGGC TCAACATGAG TAGCCCCCA      300
CATGGGAGTC CTGGTCTTGC CCCAAACCAG CAGAATATCA TGATTTCTCC TCGTAATCGT      360
GGGAGTCCAA AGATAGCCTC ACATCAGTTT TCTCCTGTTG CAGGTGCGCA CTCTCGAG      418

```

(2) INFORMATION FOR SEQ ID NO:1234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

GAATTCGGCC	TTCATGGCCT	ACGCCTCTTT	AACACATGGG	CCTTTGTGTG	GACACCATCT	60
TTCCCTGAAA	CCTGTCTGCA	TCTTTTCTGT	CCCTTCTAAC	CATCCAGTTT	GTTCTTCCCC	120
AAGATGGGCT	GCCACAAGTT	GCCATTTCCT	GACTGGTGCA	TGGTTCCAGA	CAGCTCGCGG	180
GCAGACACAG	GGAAGGAATC	TTATCTCGTT	TTTGTTTTTT	TGTTGTTGTT	TTTGTTTTTT	240
TCTTTTTTGT	TGTGGTTGTT	GCTGTTGTTT	TGAAACGGAG	TCTCACTCTG	TTGCCAAGGC	300
TGGAGTG CAG	TGGCGCAATC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

GAATTCGGCC	TTTATGGCCT	AAAAAAAAAA	AAAGAAAGAA	AGAAAATGTT	GGATATAGTA	60
GGTCTGAGCT	TTATGGAGAA	AGAAGGTTTG	AAGTAGCTTC	TGGGATATGG	AAAAAGAACT	120
TATGAGAGAA	ACAGACTTCT	GGGAATCCTT	CAAGGACTAG	AAGAGAACAT	AGATTATGAA	180
AGAATGAGTC	ATTGATCAGT	GTAGTTGTAG	ATTAGAATAG	TTGGACAGTT	AGGATTGCTT	240
AGGCAGAAGA	ATGGAGGAAG	TCACGGCCTA	GGGAGTTAAC	AGTGTTAGGA	GCAAGAGAGG	300
TTTAACTAA	TGAGCCATGG	AGTTTAAAGCA	GAGACAATAG	AGAATAAAGT	AAAATAGGAA	360
GAAAAATTTA	AAAAGAAAGT	AGAAAAGTCC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

GAATTCGGCC	TTCATGGCCT	ACACAATTCC	AAAGAAGGTG	GTGTGCCACT	TCAGTGGGAA	60
GGCCTATGCC	GACGAGGAGC	GGTGGGACCT	TGACAGCTGC	ACCCACTGCT	ACTGCCTGCA	120
GGGCCAGACC	CTCTGCTCGA	CCGTCACTG	CCCCCTCTG	CCCTGTGTTG	AGCCCATCAA	180
CGTGGAAGGA	AGTTGCTGCC	CAATGTGTCC	AGAAATGTAT	GTCCCAGAAC	CAACCAATAT	240
ACCCATTGAG	AAGACAAACC	ATCGAGGAGA	GGTTGACCTG	GAGGTTCCCC	TGTGGCCAC	300
GCCTAGTGAA	AATGATATCG	TCCATCTCCC	TAGAGATATG	GGTCACCTCC	AGGTAGATTA	360
CAGAGATAAC	AGGCTGCACC	CAAGTGAAGA	TTCTTCACTG	GACTCCATTG	CCTCAGTTGT	420
GGTTCCCAT	ATTATATGCC	TCTCTATTAT	AATAGCATTC	CTATTTCATCA	ATCAGAAGAA	480
ACAGTGGATA	CCACTGCTTT	GCTGGTATCG	AACACCAACT	AAGCCTTCTT	CCTTAAATAA	540
TCAGCTAGTA	TCTGTGACGC	TCGAG				565

(2) INFORMATION FOR SEQ ID NO:1237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

GAATTCGGCC	TTCATGGCCT	ACACTGAGAA	CGAGATGGCT	ATTTATGAAT	TCATTCATAA	60
CTTTGTGGAA	GTTTGTAGATG	AGTATTTTCAG	CCGAGTGAGT	GAATTAGATG	TATCCTTTTT	120
CAATACTGTT	TTCCACAGTA	CTTGGCAAAT	GCACTCTGGT	CCTTATCAGG	TAAGTACCAC	180
AAGGCAGGAA	AACTATTCAG	CAGAGTCCAG	AGTGTTTCATC	ACCAACAAC	ATGACAAGAC	240
AGCCAGAGGT	GTGTGTGTTC	TGCAGAACTC	CTCCCAACT	TCGTCACCCA	AGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

CTCGAGTGGG	GGGAGGGAGG	GGGAGGAGAG	AAGGGGAGGT	GGATGGGGGA	GGGGGACAGT	60
GGAGGAAGAG	GGAAGAGGGA	GAAAATAAGG	AGAAAGAGAA	GGAAAGGCAG	AAGGGGAGGG	120
GAAGGGGGAA	GGGGAAGAAC	AAGGGGAATG	GGAAGAGAAT	GAAGAGGAAG	AGAAGAGGAA	180
GAGTAGGAGG	AGAAATAACA	AAAGGCACCA	GGTTGGAAAG	GAAGAATTTA	AAATATATTT	240
ATTTGCAAAC	GACATTATCC	TATAGTGAAA	AATCCTTAAA	AGTTAGGCCA	TGAAGCCGAA	300
TTC						303

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 315 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGCT	TCATGGCCTA	CTCTTCTCTG	AGACAGAAAA	CTAGCGAACC	CCAGGGGAAG	60
GTGCCGTGTG	GAGAGCACTT	TCGGATTTCG	CAGAATCTAC	CAGAGCACAC	CCAAGGCTGG	120
CTTGGGAGCA	AATGGCTCTG	GCTTCTTTTT	GTTGTTGTGC	CGTTTGTGAT	ACTGCAGTGT	180
CAAAGAGACA	GTGAGAAGAA	TAAGGAGCAG	AGTCCTCCTG	GCCTTCGAGG	CGGCCAACTT	240
CACCTCTCCAT	TAAAGAAAAA	AAGAAATGCT	TCCCCAACA	AAGACTGTGC	ATTCAATACC	300
TTAATGGAAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 553 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

```

GAATTCGGCC TTCATGGCCT AAAATGACCT TGGTAAGAAT GGGTTTTTAC AATAAATGAA      60
TTTTTAATTC CAAGATGTTT TTTCATTGAA ATTACTGCCC CAGTTGCATT AAAAGTGTGG      120
CTGTGCAAAG CTTCCCTTCTA CCAGGCTTCA TGTGCAGGAC CTTGGTTTTT GTTGCCTTGG      180
CAATTCCAAA AGCAGGTGTT GAAAGAGAAG AAGACAGGAA AAAGAAGATG GGAGAAAAAT      240
TTTCCAAATC AGAGTTCTCA GTCCAAGGAC TTATTCTTGG GGGTTCAAAA ATTCTAACAG      300
TATTTTAAAT TTGCCTCTAT TTCGATGGTT ACTTGATTAA ACTGTTCTAA CATTTCTAAA      360
AATAAAATTT TGCAATGATA ACTTTTATAT CAGACTTTAC CTCTGTTTCC CAAATTGGAA      420
TCTTTAGGAA TATTTTTTTG AGATCACTTT TTTCTTTTTT TTCTTTAACA AAGATTGGGA      480
ACCGCTCTTA GGAACAGACA AATGGATTTC CATATTTCTT AAAGCGTTGA AGTAAATCTC      540
TGCCACCCTC GAG                                         553

```

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

```

GAATTCGGCC TTCATGGCCT ACTCTTCTCA AGGCTTTGAA ATCTCCCCTT GCACTGAGAT      60
TAGTCGTCAG ATCTCTCCCC GTCTCCCTCC CAACTTATAC GACCTGATTT CCTAGGACG      120
GAACCGCAGG CACCTGCGCC GGGCGTCTTA CTCCGCTGTC TTGTTCTGTC CCCTCCCTCG      180
GACCAAAACAG TGCTCATGCT TCAGGACCTT GTTTGTCGAA GATGTTGGTT TCCTTTCTC      240
TGTTATTTAT ATAAAAATAA TTTATCAAAA GGATATTTTA AAAAAGCTAG TCTGCTCTGA      300
AACTTGTTTA CCTTAAATTT ATCAGAATCT CAGTGTTTGA AAGTACTGAA GCACAAACAT      360
ATATCATCTC TGTACCATTG TGTACTAAAG CACTTGAGTC TAATAAATAA AGAAATCAGC      420
ACCCCTAGGC CATGAAG                                         437

```

(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

```

GAATTCGGCC TTCATGGCCT AAAAAATAT GTCTTTTGAA AACCNAGTCA AGTACCTAGA      60
GATGAAAACC ACAAATGAGA AACTGTTACA GGAATTAGAT ACACCTCAAC AACAATTGGA      120
TTCACAGAAC ATGAAAAAAG AGAGCCTGGA AGCAGAAATA GCTCACTCCC AGGTGAAACA      180
GGAGGCGGTA TTGCTGCATG AAAAACTTTA TGAGTTGGAG TCCCATCGAG ATCAAATGAT      240
TGCAGAAGAC AAAAGCATAG GATCTCCAAT GGAAGAGAGA GAGAAATTAC TTAAGCAGAT      300
TAAAGATGAT AATCAGGAAA TAGCCAGCAT GGAAAGACAG TTAACAGATA CAAAAGAAAA      360
GATAAATCAG TTTATTGAAG AAATTAGACA ACTTGACATG GATTAGAGG AACACCAAGG      420
TGAAATGAAC CAGAAATACA AGGAGCTAAA GAAAGGGGAG GAACATATGG ACACTTTAT      480
TGAGACTTTT GAGGAAACAA AGAATCAGGA ACCAAAACCT GAG                                         523

```

(2) INFORMATION FOR SEQ ID NO:1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

```

GAATTCGGCC TTCATGGCCT AACTGATTAC AGGGAAAGAC AAAAAGCAAA AGGTGATTGA      60
AACATAGTTC TAAATAACAA GAAGGGAAGT TTTCTTAAAC TGATCATCTG TCTTATTGTC      120
ATGACAAAGG GTAAAATTTT ATTTTCAGTC CTTTAGTGCT TTTAATAAT TCACCATACA      180
TATTTTACTT ATATCCCAT AACTGTGGGA CTTAGCACAG TTTACATTTT CAGTCATGTG      240
AATATAATTA TCTGTATTCC CTGTTGGACT GATGGGGGAA ATTGGATCAT TATATAATTT      300
AAAAGACACC TCCCAGGCA CCCATTGTGT TCTTAGGAAG TCAGTGCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

```

GAATTCGGCT TCATGGCCTA ATTCAGCTTT ATCGTTCCTT CTGGCAGTTC AGTTGTTGGC      60
CCAGATTAT TAAGGTTCGA CAGAAAGCAA CTGAAATCTC CCTTAGAAAT AAAGTTCCTG      120
GTGTGAAGAA AAAAAAGATC CATAAAAGT CTCATCCTTA GGACAGCAAC TTTTATAATG      180
CACAGCTGAT CTGAATAGCT CTCTGGATTG TGGCCTTGGA CAACAGTTCA GACTGCATTA      240
TTGAGTATGA ACCTTGAGCT TTCTGAGTCT CTTCTTTTGT CTCTTTTACT AGCAGACCTT      300
CTCGAG                                           306

```

(2) INFORMATION FOR SEQ ID NO:1245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 591 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

```

GAATTCGGCC TTCATGGCCT AGGGTTTGGG GGTTCCTGAGA TGTTACTCTC ACTGAAGTCT      60
GTGTGGGAGG CGGATTACTA AACAAGAAAT TGCTAATTAA TCTCCAGATG GCAAGGAATG      120
GATAAAGCAC TGTTCCCAAC AAGGTCCAAA TGTCTCCGCT GGAAGAGTGT ACAATGGATG      180
CAGTTGGTCT TCCTGCTGGC AACAGTACCA CCGAAGCGCT TGGGGCAAGT TCCAAATCCA      240
GTAACCTCTT TTTATAATCT TCTTTGGTAA ATTCCCTCCT GGGAAACATG GTTGCTAACG      300
AAAAATTACC GTAAGTGTG CCAACAGTCT GTGCAGCAAA CTGCCTTGCC TCTTCTAGAG      360
GAGCATCAGA AGGGAACCTGA TTTGTAAAGG AAGAACCATC AGGAAGACGG AATTGAATTC      420
TTGCAACAGT GCTTCTTTCT CTTGCATAAG ATTCCCTCTT GACTTCCATT TCTGCCTGTT      480
TTGCTAGCAA GGCAGCAGCT TTGGCAGCCT CTAATTCTTC CTTTGTCTTT GCAAAACGAG      540
CAGCTCTCTC TGCACGGTCC AATGCAATCT GCTGTTTAT ACGTTCTCGA G              591

```

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 593 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

```

GAATTCGGCC TTCATGGCCT ACTTCGGGGA AGAAACCTTC ACCAGAGTGG AGCAGTTCAG      60
ACCATGGAAC CTCTGATCCA AGCAGCCCAG CTCCTGCAAT TAAAGAAGAA AACCCAGGAG      120
GACGCAGAGG CTATCTGCTC CCTGTGTACC TCCCTCAGCA CCCAGCAGAT TGCAAAATT      180
TTAAACCTTT ATACTCCCCT GAATGAATTT GAAGAACGGG TAACAGTGGC CTTTATACGA      240
ACAATCCAGG CACAAC TACA AGAGCGGAAT GACCCTCAGC AACTGCTATT AGATGCCAAG      300
CACATGTTTC CTGTTTGTG TCCATTAAAT CCATCTTCTC TAACCATGGA CTCAATCCAC      360
ATCCCAGCGT GTCTCAATCT GGAATTCCTC AATGAAGTCT GAAGATGCAT GTTCCAGCA      420
TTAGTTTGAT TCCCAATGTG AGCAAGAAGG AAGTATATAC AGTAAAGTAA ATTCAAGGAT      480
CTGTTAAATC TGGTAAAGT AGATCAAATC AGAGATTGAC AGCCTGTGGA GGGTGCTGAA      540
CTATACAGAA TTAGACACAA CTATGTCATT ATTTTGTGTA CCAACTACTC GAG      593

```

(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

```

GAATTCGGCC AAAGAGGCCT AACTCAGAA TGGTGCTACT TGAAGACTCT GGATCTGCTG      60
ACTTCAGAAG ACATTTGTG AACCTGAGTC CCTTACCACAT TACTGTGGTC TTACTTCTCA      120
GTGCCTGTTT TGTCAACAGT TCTCTGGAG GAACAGACAA GGAGCTGAGG CTAGTGGATG      180
GTGAAAACAA GTGTAGCGGG AGAGTGGAAG TGAAAGTCCA NGAGGAGTGG GGAACGGTGT      240
GTAATAATGG CTGGAGCATG GAAGCGGTCT CTGTGATTG TAACCAGCTG GGATGTCCAA      300
CTGCTATCAA AGCCCCTGGA TGGGCTAATT CCAGTGCAGG TTCTGGACGC ATTTGGATGG      360
ATCATGTTTC TTGTCGTGGG AATGAGTCAG CTCTTTGGGA TTGCAACAT GATGGATGGG      420
GAAAGCATTG TTGCAATCAC AATGAAGATG CTGGCGTGAC ATGTTCTGAT GGATCAGATC      480
TGGAGCTAAG ACTTAGAGGT GGAGGCAGCC GCTGTGCTGG GACAGTTGAG GTGAGATTC      540
AGAGACTGTT AGGGAAGGTG TGTGACAGAG GCTGGGGACT GAAAGAAGCT GAACTCGAG      599

```

(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

```

GAATTCGGCC AAAGAGGCCT AACCGAATGG ATTATCTGTG GGAGTAACAT CTCAGAAGAC      60

```

TATGAAGCTA ATTCTGCTT CAAGACACAG AGCTACACAA AAGGTGGTTA TTGGAGATCA	120
TGATGGGGTA GTTATGTGCT TTGGCATGAA GAAAGGAGAA GCAGCAGCAG GTTCAAGAC	180
TTTACCCGGG CCGAAGATTG CAAGGCTGGA ACTGGGAGGG GTTATCAACA CACCTCAGGA	240
GAAAATTTTT ATTGCTGCAG CATCTGAGAT TAGAGGCTTC AAAAAAGAG GAAAACAGTT	300
CCTCTCCTTT GAAACAAACC TCACTGAAAG CATTAAAGCT ATGTATGTCT TTTGTTCTCT	360
TTTGTATTTT TACATACTTA TTTATAATAT TTTGGATAGA TGTGAGGCAA CCCTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 800 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

GAATTCGGCC AAAGAGGCCT AGCAGAGCAC AGCATCGTCG GGACCAGACT CGTCTCAGGC	60
CAGTTGCAGC CTTCTCAGCC AAACGCCGAC CAAGGAAAAC TCACTACCAT GAGAATTGCA	120
GTGATTTGCT TTGCTCTCT AGGCATCACC TGTGCCATAC CAGTTAAACA GGCTGATTCT	180
GGAAGTTCTG AGGAAAAGCA GCTTTACAAC AAATACCCAG ATGCTGTGGC CACATGGCTA	240
AACCTTGACC CTTCTCAGAA GCAGAATCTC CTAGCCCCAC AGACCCTTCC AAGTAAGTCC	300
AACGAAAGCC ATGACCACAT GGATGATATG GATGATGAAG ATGATGATGA CCATGTGGAC	360
AGCCAGGACT CCATTGACTC GAACGACTCT GATGATGTAG ATGACACTGA TGATCTCACC	420
AGTCTGATGA GTCTCACCAT TCTGATGAAT CTGATGAACT GGTCACTGAT TTTCCACCGG	480
ACCTGCCAGC AACCGAAGTT TTCACTCCAG TTGTCCCCAC AGTAGACACA TATGATGGCC	540
GAGGTGATAG TGTGGTTTAT GGACTGAGGT CAAAATCTAA GAAGTTTCGC AGACCTGACA	600
TCCAGTACCC TGATGCTACA GACGAGGACA TCACCTCACA CATGGAAAAGC GAGGAGTTGA	660
ATGGTGCATA CAAGGCCATC CCGTTGCCC AGGACCTGAA CGCGCCTTCT GATTGGGACA	720
GCCGTGGGAA GGACAGTTAT GAAACGAGTC AGCTGGATGA CCAGAGTGCT GAAACCCACA	780
GCCACAAGCA GTACCTCGAG	800

(2) INFORMATION FOR SEQ ID NO:1250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

CAATTGCCAA GGAAACAGGC CTTGGCCTGA AGGTACTAGG AGGAATTAAC CGGAATGAAG	60
GCCCATTTGGT ATATATTTCAG GAAATTATTC CTGGAGGAGA CTGTTATAAG GATGGTCGTT	120
TGAAGCCAGG AGATCAACTT GTCTCAGTCA ACAAGGAATC TATGATTGGT GTATCATTTG	180
AAGAAGCAAA AAGCATAATT ACCGGAGCCA AGTTGAGTAC TAGGTTAGAA TCTGCTTGGG	240
AGATAGCATT CATAAGACAA AAATCCGACA ACATTCAGCC AGAAAATCTG TCATGTACAT	300
CACTTATAGA AGCTTCAGGA GAATATGGAC CTCAAGCCTC CCTCGAG	347

(2) INFORMATION FOR SEQ ID NO:1251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

```
GAATTCGGCC TTCATGGCCT ACAGCCCTCT TACTAGGCCA GCACGCTTTC GCTTTTGCAT    60
TTACAATCAC ATACCCCATC CCCTCCACTT GAAAAAGAAT TTTGTTTTTG TCGTTATCCA    120
AAAATCTCAT CTAAATCAA CCGTCTCGTC TCCCTGTAGC TTCATTACCA TCTCAGAAGC    180
AGCAAAGGAG CCAGCAAAAG CTAAGGTACA GAAAGTCGCT TTGGAGGATG ATGGTGAGTG    240
GTTATACTTA ATAGAAGCTA TCATTTATTA AGCACCTAAT GTGTGTCTGG AGGGGCTCGA    300
G                                                                    301
```

(2) INFORMATION FOR SEQ ID NO:1252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

```
GAATTCGGCC TTCATGGCCT TGCATGCCCC CAGTGAGCTG AGATCGCAGC ACTGTACTCC    60
ATCCTGGGGG ACAGAGCTAG ACTCCATCTC AAAAAAGAAA GTGCCTGGTC GTCTTTCCAC    120
ACGACTCCGT TTCCACTCCC ATAAAATGCT ACGTTAGCTG TTTTGAGGGT AGATGCCCTT    180
AGACTGCCAA CTCACAAAGT TTTATTGGGC ACCTGTTACC TGTTACAGCAG AGATTGTAA    240
AAAAAGACAC ATCAGGTGGC CTTTGCTTGC AAGAAATCAG CCTTTGGAAC CTGTGGAGAA    300
AAGTTAAATA CTGCGTACTG TGCAATGAA GGGTGGGAGC TATTGAAGGG AAGAGATTCA    360
CCCTGAAAAC CCAAGAATGG CCAAATCTCG AG                                                                    392
```

(2) INFORMATION FOR SEQ ID NO:1253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

```
GATTCGGCCT TCATGGCCTA GCTGGTCTCT GGTTCAGGA TCGAATCGCC CCCAGCAGTA    60
TGTTATATAT CATCAGATAA GGTGAGGGAC AACCTTCCTC ACCCCCATAC CTGGCCAGCC    120
TGTAATGGGG AGGAGGCCTT TCTGTGGTGT GGTGGGGCTG GAGATTGGGC AGGGACAGAG    180
ACATACCTTC TCTGGGAATC TGAGAGAGAT ACCTTGAATC TAGGGGAAAAG GGATTAGGTT    240
TTGAAAATGT TAGCCATTTT GTAAAGAGAA GTCCCTCACC ATTTCCCTTC CCATTAGTCC    300
TGGGAAATAG ATTGGGTAGA GGCTCAGAGC CTGGCCCTCG CTGCACTCCC AGCTTGAGC    360
TACTGGGTTG TTGACAATGT TTTGGGGTTT CCAGGCCTTA GCAAGAGAAA GCCTCCCCAG    420
ATACCACTCT AGGGGTAGAT GAAGGGGGCA GGAGCCCTGA AGGAAGGATT TGGGGCCGGC    480
CATTCAATCA TTCAGAAACA CTTATCATCC CTTATCAGAA GCCCTGACCT ATTGAGAGTC    540
AGGCACGTGC TATTGAGAGT CAGGCACGTG CTCATATAAA GATGAGTTTA ACATGGATCT    600
CCCTCTCGAG                                                                    610
```

(2) INFORMATION FOR SEQ ID NO:1254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

GAATTCGGCC TTCATGGCCT AGAGGATTTA CACATGGCAT TCAGTGTCT GTATAGATCT	60
GCCTACCTTT GTGAATTCAT CTGTTAACCC CTCTTCCTT GAGAGAGCAC CGGCGATGGT	120
GGTTAACTCC TGTGTTTCT CTCTCTCCTA CTGGTTATTC TTGAATTAAG CACAGACTCG	180
TCAGCTCGGT TGCTTTATCA TGAATAATGT GTGTGACCTT GCAGTTCTTC CACAGTTCAG	240
CAAACAAGTG CTAGCTTCAC TGACCAAAAA TTAAGGAAGG AAAACACAGT TTTTAAACG	300
ATCCATCTTT TAACAGCCGA AACTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 488 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

GAATTCGGCC TTCATGGCCT ACTAAGAGAA CAATTAGAAT ATTGGAAGAT AAAGGGACAA	60
GTACTGAATT AGTTAAAGAA AATCAGAAAC TTAAGCAGCA TTTGGAAGAG GAAAAGCAGA	120
AAAAACACAG CTGTCTTAGT CAAAGGGAGA CTCTGTTGAC AGAAGCAAAG ATGCTAAAGA	180
GAGAACTGGA GAGAGAACGA CTAGTAACTA CGGCTTTAAG GGGGGAATC CAGCAGTTAA	240
GTGGTAGTCA GTTACATGGC AAGTCAGATT CTCCCAATGT ATATACTGAA AAAAAGGAAA	300
TAGCAATCTT ACGGGAAAGA CTCCTGAGC TGGAACGGAA GCTAACCTTC GAACAGCAGC	360
GTTCTGATTT GTGGGAAAGA TTGTATGTTG AGGCAAAAGA TCAAAATGGA AAACAAGGAA	420
CAGATGGAAA AAAGAAAGGG GGCAGAGGAA GCCACAGGGC TAAAAATAAG TCAAAGGAAA	480
CACTCGAG	488

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 316 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

GAATTCGGCC TTCATGGCCT AGATCCAGAC ACGGCACTGC AGCTTTCAGC TGACTAGCTG	60
TGTGACTTGG GCAAGCCCCT TAATCTCTCT GATCTCGGC TCCCTCCTCT GTAAATGGA	120
ATTAAGAATA ACCTCATTGA GGAGCTTCCT GAGGAGGTAA GGAAAGTGCC TGGCACAGTG	180
CCAGGCTGCT AAGAGATCAA TAAATGTCCC ATCCCCCAGC CCCACCCAG TTCTTTCCAG	240
GAATTTGAGA GACTCCTCCC CCTGTGTTTG AAAGTGGCAA AGTCTGGCAC ACTGCCTCA	300
TAACACATAA CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

```
GAATTCGGCC TTCATGCCTA AGCTTCCTTC AGCAGCGCAG GCGGTGGTCC CTGAGGCCCG      60
TGGAAGGAGT CAAACTTGCG GGAATTTTGC AGTTTATCTG CAGGGCTGTT GTTTCACGCA      120
AGACCCAAAG CTAGAAAAGG AGGAGGAAGA AACTGACCCG ATCAGTGCCA GAAGTCATTG      180
TATTCAAAGA AGAATAAGCA AGAAAGAAAA GAAGGAAGGA AGAGAGGTAG ACAGATACAA      240
GATGAAATCC TGTCAAAAAA TGGAAGGAAA ACCAGAAAAT GAGAGTGAAC CAAAGCATGA      300
GGAAGAGCCA AAGCCTGAGG AAAAGCCAGA AGAGGAGGAG CTCGAG                        346
```

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

```
GAATTCGGCC TTCATGGCCT ACGGCACTTC AAAAATATAA ATCAAAGTCC ATGACTCTAA      60
AAATAACATA TGCAATGATA TGCTCGCCCC TTTGACCCCT CTCTCAAGAG AAATCCCTCG      120
CCAAGTAATC CACATACATA AGAAGTGTA AAGTCCCTA GATTAAAAGA GCATAAAACT      180
TCATTATGGA AACACAGTAG TCCCGGCTAT TTGGGAGGCT GAGACAGGAG GATCACGAGT      240
CCAGGAGTTT GAGGCTACAG TGAGCTATGA TCGCGCCATT GCACTCCAGC CTGGATGACA      300
GAGGAAATAT TAATTTTAGA GTAATCAGAG AAAGCCAGGT CTCGAG                        346
```

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

```
GAATTCGGCC TTCATGGCCT ACCCCATTCA TGCAGGAATA AATCAAGTGA GCAGTTCAG      60
ACTTTTGCAT AATATTTTTA CTATGATGCT GTTTTATTAA TATTTCTAA ATTTCAAAC      120
AAAAAGTGAA TGTTTGAAAT TGCTGGGTCC CGATGTTGGT GGCTGTTGGA GTTTGGACC      180
ACTCGCTAGC AGTGATTGA AGATTATAAT TAGCTAAAAT CAAAAACAAA AAACCAACAA      240
CAAAAATTGT ATGGTGCGGA ACATGCACCT TGACAATGGT ACTAACTTGT TATTCTATAG      300
AACACGTTAG AATAGATCTA TTTTGGCCAG AGCTTCTCGA G                        341
```

(2) INFORMATION FOR SEQ ID NO:1260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GAATTCGGCC	TTCATGGCCT	AAAGATAAGG	TGGCTGTAAA	TGCGTGGATT	TATACCTGAG	60
TTCTCTCATC	TGTTTCACTG	ATCCATGTGT	CTGTTTTTAT	GCCAGTACCA	TGCTGTTTTG	120
ATNACTATAG	CTTTGTAATA	AATTTTGAAG	TCAGGTAGTG	TGATNCCTCC	AGCTTCATTC	180
TTTTTGCTCA	GGATNGCTTT	GGNTATTTCAT	AGTCTTGTGG	TTCCATGTAA	ATTTTAGGTT	240
TTTTTTTTTT	TTTTTTTTTT	TTTTTACTAT	TTCTGTGAAG	AATGTTATTG	GTATTTTGAT	300
AAGGATTGTA	TTGAATCTGT	AAATTGCTTT	GGGTAGTCTT	GTCATTTAAA	AATATTGTTA	360
TAGTTCTTCT	AATCCATGAA	CATAGAATAC	CTTCCATTT	TTTTGGTGTC	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 86 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

GAATTCGGCC	AAAGAGGCCT	AGGCAGACAT	CCATAAACAT	TTTCAAAATG	CAGGGTATGT	60
TTTTCAAGTGT	TAAGGCAACT	GTTCTG				86

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 332 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

GAATTCGGCC	AAAGAGGCCT	ACTTTTGGTA	ATAACATTTT	AAAGCAGGAA	GTATCTACGG	60
TGTGATCGTG	GTACAGCTCT	TAGTTCAAGT	GTGAAGACAT	TTGGTTGTCT	TGTATATGAC	120
CTAGAAGAAG	GGGCGTCTGC	TGGAAAACAA	TGCTGTTCTT	TTTCTCTTTG	TTTTTTGGGA	180
CGGGGTCTTA	CTCTGTTGCC	CAGGCTGCAG	TGCAGTGCCT	CAATTTTTC	GTTCAGTGCA	240
GCCTCGACCT	CTGGGGCTTA	AGCGATCCTC	CTGCCTCGGC	CTCCCCAGTG	ACTGAGACCG	300
CAGGCACACA	CCACCACACC	CGGCACCTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

GAATTCGGCC	AAAGAGGCCT	AAGCCAGGGT	AGGGACAGCA	GA CTGGCAGG	AATGAGTGAC	60
AGTTCTATGC	AAATGGAGTT	ATTATTATTA	TTGTTATTAT	TAATAAGGGC	AGGTTTGTAC	120
CAGAACTGCC	CAGTATGGCC	TGTGACTTCT	GCGCAGCAAT	TATTTCTCCA	GGGACAGGGC	180
CTGAAGCTAC	CTCACAGTGA	TGCAAAAAAA	TGGGATTCCC	CACTAACCCC	CACACACACC	240
CCCTTCCTAC	CAAACCACAC	ATCTCTCAGT	CCTCTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

GAATTCGGCC	AAAGAGGCCT	AGGATCACGG	AGGTGGTGCC	TGTGTGTCCC	ACAGGAAGCA	60
AAAGCTGATG	CCCAGTCCCC	AGCATACCTA	AGTAAACTTC	AGGTCCACTC	CCAGCACGTT	120
TCTCGTGATA	GTAAACTAT	GAAGGAAGTC	AGTGTACAAG	GAGCTTCTAC	AAAATAGGCA	180
GAAGACAGTA	GCCAGATGGG	CCAAGGCCCC	CAGCCACCCA	CGCCCCCTCC	TCTCCTTGAA	240
GACCTTCGGT	TCCAACCCCA	CCATCAGCAG	GGCTCTGCTC	AGTTCCTCCT	TATGTGTATC	300
ACCACAGGGC	TGCTGGCTCG	TGTCACGTTT	ACCACCAGAC	CCCACATCAG	GAGTCCCCGC	360
AGGGGTGTGG	GGAGGCAGCG	CTGCCTGGTT	GGCCGTGGAG	CCGTATGGAA	CATGGTGCCT	420
CACAGGCAGT	CTGCTTGGCG	TCCTGGATCC	TGGCTGTATC	CCGCTGGAAA	GGATGTGTGT	480
GGGTCTAAGA	TATGTATATA	ATAGAAACAT	TTATTCAGAA	GCTTTAGTCA	AGACTTCATT	540
TTTAAGTTCA	GAGTAATAAA	CTCATAGTCT	AAATTTCCTA	ATTTTCTGT	TTAATTTACA	600
TAAATAAAAT	GAAATGCAAT	TTCTTCGAG				629

(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

GAATTCGGCC	AAAGAGGCCT	AGAGGTGCCC	ATTTCAATAA	ATTTTAGCAC	ACTGGATGAT	60
AAAGGAGAAA	TGCTTTGGTT	TAAGAGAGGG	AAATCTTTGT	TACCAATACT	ATCGGTGAGT	120
TCACCTAATA	CTTCCTCGTC	ATCAAGTTCA	TTGGAGTACG	CATCTTCTTC	ATCCTCATCT	180
CCCGGTTTCT	TGGGTTCACT	TTTGACAGGG	CACTCCCCGT	TTGGGTGTAA	AACGTTGCTT	240
TCTTTTGGCC	TTTCACAGTT	GTCTCTTGG	TCTTTGCTCT	CTGACATCTT	GCTAGACTCA	300
GACGATGAGT	GGCTGAGGGA	GACAGAGGTA	ATTGGGGTGT	TCACTACTAA	ACTAGACAGC	360
CCCCCAGAT	TCACTTCAGC	CTTTGGCATT	TGGGTAATCC	CCAGCGGCTG	CTCTGCTGAG	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

```

GAATTCGGCC AAAGAGGCCT ACCGCCCATC GCGCCGGCGC GACCCGCAGG AGCGTAGAGA      60
GCGCGGGACT AGAGTGCAGA GCTCCGGGAC GTGGATCGGA GCCGGCGCGA TGGGCGGAGA      120
GCAGGAGGAG GAGCGGTTTCG ACGGCATGTT GCTGGCCATG GCTCAGCAGC ACGAGGGCGG      180
CGTGACAGGAG CTTGTGAACA CCTTCTTCAG CTTCTTCGA CGCAAAACAG ACTTTTTCAT      240
TGGAGGAGAA GAAGGGATGG CAGAGAAGCT TATCACACAG ACTTTCAGCC ACCACAATCA      300
GCTGGCACAG AAGACCCGGC GGGAGAAGAG AGCCCGGCAG GAGGCCGAGC GGCGGGAGAA      360
GGCGGAGCGG GCGGCCAGAC TGGCCAAGGA AGCCAAGTCA GAGACCTCAG GGCCCCAGAT      420
CAAGGAGCTA ACTGATGGAG AAGACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

```

GAATTCGGCC AAAGAGGCCT AGCTACTAAG GCAGGTGCAG CATCAATGAT TCACTACATG      60
GTTCTGATAT CAGCTCGCTT GGTACTACTC ACTTTGTGTG GATGGGTACT TTGTTGGACC      120
CTCGTCAATC TCTTTCGAAG CCATTCAATC CTCAATCTCC TTTTCCTTGG CTACCCGTTT      180
GGTGTATTATG TTCCTCTTTG CTGTTTTCAT CAAGATAGTA GAGCACATCT TCTTCTCACA      240
GACTACAACAT ATGTGGTTCA GCACGAGGCA GTAGAGGAAA GTGCCTCGAC TGTGGGAGGC      300
TTGGCCAAAT CCAAAGACTT TCTCTCCTTG TTGCTGGAGT CGCTAAAAGA ACAGTTTAAAT      360
AATGCCACAC CCATCCCCAC CCACAGTTGT CCCCTATCTC CAGACCTCAT TCGCAATGAA      420
GTAGAATGTC TGAAAGCAGA TTTCAACCAC CAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

```

GAATTCGGCC AAAGAGGCCT AGAGTTTTC AAGCCCGGC TGGTGTTTAA AACGTGTTTT      60
GGCTTTGTTT ATTTTATGGT GTTGGTGTG GTATTGGTGG TCATGTACTG GCATGTAAGA      120
TTTCTTTTCT CTTTCCCTCT TCTCTCTGCT TCTACATTCT GTTCATTGAG GCTTCCAAC      180
GAATATGAGA GGAACGGGAG ATATGAGGGC TCAAGTCGCA ATGTATCTGC TGAGCAAAAA      240
GATGAAAACA AAGAAGCAAA GCCTCGATCC CTACGCTTCA CCTGGAGCAT GAAAACCACT      300
AGTTCAATGG ATCCCGGGGA CATGATGCGG GAAATCCGCA AAGTGTGGA CGCCAATAAC      360
TGCGACTATG AGCAGAGGGA GCGCTTCTTG CTCTCTGCG TCCACGGAGA TGGGCACGCT      420
GGTAACCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

```

GAATTCGGCC AAAGAGGCCT ACCCTGAACT ACTCCAGTGT GCACCTGCAC AACCTCCATG      60
GTGCCTCTGG AATTGGGTAG CATGGTGGCC CTGCTGATGA GCACCCCAAG GGGCCATTGG      120
GGGACCTCTG AGAATCTCTG CCAGAGCAGT TTGGGTGGGA GTCGATTAAG GAAAGAAGCA      180
GCAAGATCCA GGACTTTTAA TCTTAAAAGA GAGAGAAATG CTGGCAGATG AACATTCTGA      240
GGATAAGGAG CCTGAGTAAT TGAGCGATTA GGGATGGAGA CATAACGATTG AATTCTAGAC      300
CTGCCTCGAG TAGCCAATCA AGCTGTGTCT GGCTGTGCAC TATCCAGGCC TCCACATTCT      360
GTGACAAACT AACAGGGCCG GCTCCTGTCA CTCCTGTTCT CGCCAGCGGG TTTTACCCTG      420
AAGGTGACTC AGGCCTTCTC TTGCCCCTAG ATCGTGGGGA TCATCACACG GCACAACCTC      480
ACCTATGAAT TTCTGCAGGC GTAGCTCGAG      510

```

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

```

GAATTCGGCC AAAGAGGCCT ACGCATCCCC TGCAGTCTTT GCCCCCAGAC GTTTGGTACC      60
AACTCGAAAC TGCCTTGCA CCGGTTAAGG GTACATGACA AAACACCTAC CCACTTCTGT      120
CCACTTTGTG ACTATAGTGG CTACCTTCGC CATGACATCA CTCGTCATGT CAACAGCTGC      180
CACCAAGGCA CCCAGCCTT TGCCTGTCC CAGTGTGAAG CCCAGTTCAG CTCAGAGACA      240
GCACTTAAGC AGCATGCTCT GCGCCGACAC CCCGAGCCTG CACAGCCTGC CCCTGGCTCT      300
CCTGCAGAGA CCACTGAGGG CCCCTGCAC TGTTCCTGCT GTGGGTTGCT GTGCCCCAGC      360
CCTGCCAGCT TACGAGGACG GCCTCGAG      388

```

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

```

GAATTCGGCC AAAGAGGCCT ACAGAACTGT GCCATATTCT TAAACATCAT ACAATATTGC      60
CTTTGAGGCA TGAAAAGCAA AGGGAATTAT TTGTTTATT GATAGCGCTT TAGTAATGTA      120
AGTGGATACA CTTAGGGCTA GCCCTCTGGC TTGTTACCAT GGTAAAGCTAG GGAATATAG      180
TTGAGGGGTC TGCAGCAGAG CTTGGAGAGG ATCTGGGATG TTAAATTCTC AAGTACTTGA      240
ACTTAGCAAC AGGACTTGGT CCCATCCACA CCTGCTCTC CACCCAGCT GGAAATAATT      300
AGTGTGACT ATGGAGGCAA AGAGAAACAT ACTTGTAAGC TTTTGTGTTT GGATTTTCTT      360
TGGGGTTTCC TTTTGTCTT TTCTGAAC TGAGGGTGAAA TCTCGAG      407

```

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```

GAATTCGGCC AAAGAGGCCT ACATAAATCA AAAATTTCTG TGAAGATGGG AAATAAGGCC      60
AAGATTGCAA AATGTCCTTT AAGAACAAAA ACTGGGCACA TTCTAAAATC AACACAAGAT      120
ACTTGATTG GGAGTGAAAA ACTTTTGCAA AGAAGCCAG TTGGTTCAGA AACATCACAG      180
GCAAAAGGTG AAAAAAATGG AATGACTTTT TCATCCACTA AGGATTTATG TAAACAATGT      240
ATAGATAAAG ACTGTCTTCA TATCCAGAAA GAGATTTTCA CTGCAACCCC TAATATGCAG      300
AAGACTAGAA ACACCCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

```

GAATTCGGCC AAAGAGGCCT ACGAGAACTT CTTTTCATC TGAATCTTCG TCAAACCTC      60
TCTCAGAGCC TTCCTCATCT AACACTTTTT CAGAGCCGTC ATCTTCAAAT TCGGAGTTTT      120
CAGAGTCATT TTCTCTAAC TCTTGTCAA GAACATTTTC ATGAAGCTCC TTTTCAGAAC      180
CTTCTCGTC CAAATCTTTC TCGAG                                     205

```

(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

```

GAATTCGGCC AAAGAGGCCT ACTCAATACT GAGGCTGATT GGTGTTTTAG GCCAATTGGG      60
TTTGAAAGAA GGATTTCAT CTGCTGTGAA AAATATTAGT TCGGTTATTG GTATGTTTAT      120
ACAGCATGCT CACGATGAAG ATATACCATG GGTATACAG TTAGCAGCCG TGATGCTCT      180
TTGTGACTTG AGTCCAGCA ATCCAGCAGA AATTCCAAG ATCCTGGAAG CTGGCGGAG      240
AGAGGCCTCC AAAAGCGTTC CGTCTGCGAT TGTGAGCTGC CTAGAGGAAG TCAGTGCCTC      300
GAGCACAGAG GAGCTTGGCT GACCTGGGAT GCCACTGAGG CTTGAGAAGT GCCTTGACAC      360
ATTTTGAACA CAAATAGTTT GATCAGCTTT CAGAATACAA AGGGAGGTTT CAAAACAAA      420
AGACATAAAA TAGATAAAAG CAGACTCGAG                                     450

```

(2) INFORMATION FOR SEQ ID NO:1275:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

GAATTCGGCC AAAGAGGCCT AAAGCAACAG GAAAGGATAA ATTCACAGAG GGAAGAGATA	60
GAAAGACAAC GGAAATGTT AGCAAAGCGG AAACCTCCTG CCATGGGTCA GGCCCCTCCT	120
GCAACCAATG AGCAGAAACA GCGGAAAAGC AAGACCAATG GAGCTGAAAA TGAAACGTTA	180
ACGTTAGCAG AATACCATGA ACAAGAAGAA ATCTTCAAAC TCAGATTAGG TCATCTTAAA	240
AAGGAGGCTC TCGAG	255

(2) INFORMATION FOR SEQ ID NO:1276:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

GAATTCGGCC AAAGAGGCCT AACAAGATTG ACCGTGAATG GTTCACTGTT GAACTCTGT	60
GATGGGTACT TGAGAAATTA TTATATTATT ATGCCTATAT TGCAGATATT TGAAGTTTCC	120
CAATAAAATG TTAAATAG TGGCAGGGGG CAAGAAGAAA AGGACCACTC AATTTAAAGA	180
AAAAATAATT TTTAAAGACA CAGAGAATAG GAAGAGGGAA AAATTGGTGA GGCAAGAGAA	240
AGGCAGCAGG TGGGGCCATA TCAAGAGTGA TTCTTCAGCA GGTGAGGCGT GATACCAACCG	300
CAAAAGTAGA GGGTTGGCTG TAAGATAGGG GGCACAGATG GCTATAATGC AAGGGAAGGC	360
GCTCGAG	367

(2) INFORMATION FOR SEQ ID NO:1277:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 624 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

GAATTCGGCC AAAGAGGCCT ACTCAGAAAC AAAGCCAAA TTAAGTTCAT CATTAAAAAG	60
CCCGAAATGT TTGAGACGGC GATTAAGGAG AGCACCTCCT CTAAGAGCCC TCCCAGAAAA	120
ATAAATTCAT CACCCAATGT TAATACTACT GCATCAGGTG TTGAAGACCT TAACATCATT	180
CAGGTGACAA TTCCAGATGA TGATAATGAA AGACTCTCGA AAGTTGAAAA AGCTAGACAG	240
CTAAGAGAAC AAGTGAATGA CCTCTTTAGT CGGAAATTG GTGAAGCTAT TGGTATGGGT	300
TTTCCTGTGA AAGTTCCCTA CAGGAAAATC ACAATTAACC CTGGCTGTGT GGTAGTTGAT	360
GGCATGCCCC CGGGGGTGTC CTTCAAAGCC CCCAGCTACC TGGAAATCAG CTCCATGAGA	420
AGGATCTTAG ACTCTGCCGA GTTTATCAAA TTCACGGTCA TTAGACCATT TCCAGGACTT	480
GTGATTAATA ACCAGCTGGT TGATCAGAGT GAGTCAGAAG GCCCCGTGAT ACAAGAATCA	540
GCTGAACCAA GCCAGTTGGA AGTTCCAGCC ACAGAAGAAA TAAAAGAGAC TGATGGAAGC	600
TCTCAGATCA AGCAGAACCT CGAG	624

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

```

GAATTCGGCC AAAGAGGCCT ACCCAAATCC CATTAGATA AATGAGGTT CATTTTTCAC      60
ATAGACTTGC AATTTTGA TAGACATTT TTTTATAGT AACAGCCTCA TTGCCTGTA      120
CAATAACTAA TAATACAGTA TTTCATAGG ACATTGTATG TGCACAGGAA ATTTTCTTT      180
AAATCTTAAA AGCCTTAAAT AAACGGGATA TTTTAATATT TTAATGTTAC TACATTTAAA      240
AAATAGTGTT TTCCTACAAA ATTTTCTGTA TTCAGTAATA CTCGAG      286

```

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

```

GAATTCGGCC AAAGAGGCCT ACTCATCATT AGCTGAAAGT TTGAGAGCTG CAGCAGAAGC      60
GGCTGTATCA CAGACTGGAT TTAGTTATGA TGAAAATACT GGACTGTATT TTGACCACAG      120
CACTGGTTTC TATTATGATT CTGAAAATCA ACTCTATTAT GATCCTTCCA CTGGAATTTA      180
TTACTATTGT GATGTGGAAA GTGGTCGTTA TCAGTTTCAT TCTCGAG      227

```

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 486 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

```

GAATTCGGCC AAAGAGGCCT ACCCGTGCGC TCTACAAATA GTTCCGTGAG AAAGATGGCC      60
GGGAACCTCGA TCCTGCTGGC TGCTGTCTCT ATTCTCTCGG CCTGTCAGCA AAGTTATTT1    120
GCTTTGCAAG TTGGAAGGC AAGATTAAAA TACAAAGTTA CGCCCCCAGC AGTCACTGGG      180
TCACCAGAGT TTGAGAGAGT ATTTGGGGCA CAACAAACT GTGTGGAGTT TTATCCTATA      240
TTCATAATTA CATTGTGGAT GGCTGGGTGG TATTCAACC AAGTTTTTGC TACTGTCTG      300
GGTCTGGTGT ACATATATGG CCGTCACCTA TACTTCTGGG GATATTCAGA AGCTGTGCTAAA    360
AAACGGATCA CCGGTTTCCG ACTGAGTCTG GGGATTTTGG CCTGTGTGAC CCTCCTAGGT      420
GCCCTGGGAA TTGCAAACAG CTTTCTGGAT GAATATCTGG ACCTCAATAT TGCCAAGAAA      480
CTCGAG      486

```

(2) INFORMATION FOR SEQ ID NO:1281:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 430 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

```
GAATTCGGCC AAAGAGGCCT AGACAAATTT CCTTTCATTG CTTCCAGCCG TGTATTATAA    60
AGTAATTAAC CTTAATTTAT AAATTTTAT ATCAAACGTC CTTTAACTT TTAGAACTGG    120
CAGGAACAGC CTTATCCCTG GGCTCCTAAT AGTTCTCCAT TTAATCAAAA TTCATCCATC    180
AGGTTCCAGT GTTAAATCAT CTTTAAATTG GGAGTTACAT TCTGGTTAAT AGTTTATATA    240
TTCGCCTCCT CTAATAGTTT TTACCACAGG GATCTCGACT CCATTTTCC TGACTCTATT    300
ATTGCTGGCA TGCATTTCT GCGGGGATGG CTTAACGCGG CCCTGCCTCT CTGGCCTCTG    360
CTGGTCGCCT CTTTGTCTCT TGGTGGTCTC ATTAATTCCT GAGAAGAGTT ATCCTTCCTC    420
CTCACTCGAG                                     430
```

(2) INFORMATION FOR SEQ ID NO:1282:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

```
GAATTCGGCC AAAGAGGCCT AATCCCCTTC TGCATGTTCC CTTCTGCAG GTCTGATGGG    60
GCCATCCAC CCTGCTGGGG AGCACAGCTT GCCCTCCCTC CCCTCCTTCT CTTCTGGCGT    120
TGCCTGCTGG GTGCCATCGG AGCAGTCCTC ATTACTTCCC ACTTTGCCC AACTTCTGCT    180
GCTGTGACCA GTCGCATACA CGTGGACACC GTGGGGAETG CCCCTCCATA CAGCTCCTCT    240
GTAAGCTTAG GACCAAGGCT GCCTCTCCAG TCTCCTGGC CCATGCCTGC CCCGGCATCC    300
TCCGCCCCAG CTACACTGGC CCCCAGATCTC GAG                                     333
```

(2) INFORMATION FOR SEQ ID NO:1283:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 269 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

```
GAATTCGGCC AAAGAGGCCT AGGACGTTGG TGTGAGGTT AGCATACGTA TCAAGGACAG    60
TAACTACCAT GGCTCCCGAA GTTTTGCCAA AACCTCGGAT GCGTGGCCTT CTGGCCAGGC    120
GTCTGCGAAA TCATATGGCT GTAGCATTCG TGCTATCCCT GGGGGTTGCA GCTTTGTATA    180
AGTTTCGTGT GGCTGATCAA AGAAAGAAGG CATACGCAGA TTTCTACAGA AACTACGATG    240
TCATGAAAGA TTTGAGGAT GAGCTCGAG                                     269
```

(2) INFORMATION FOR SEQ ID NO:1284:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

```
GAATTCGGCC AAAGAGGCCT AGAGCGTCAA TTATATCAAT TTGTCCCAGA TTTGGATGAG      60
CTGTGAGGAT GTAACACAAG GCTGGAGGAG GCAGATGAGT TTTTATCTCT TCACAGGGCT      120
GGTCGCGGCC AGGTGTTTTT AGAGGTATCG CTGGGGGCCA CAGGGTGTCA ATCAAACCTGA      180
AAATCCCCGC TGTCTTCCT CTGGTGACTT TCTGTAGAAC CTTTATTCCC ACCAGGCTGC      240
AAGACTTCCC TTCCAACGTG CTGCTTTCG ACATGGTGAA CTCCAAGTGC ACTTCACCGA      300
ACATTCCACA GGCATCTTGT ACCAGAAGGC AGGCTCGAG      339
```

(2) INFORMATION FOR SEQ ID NO:1285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

```
GAATTCGGNN AAAGAGGNCT AGAAATCANA AAGCATGCCT GTGCAATTGA ACAAAGGGCT      60
AAGTTCTAAA AACATCAGTT CATCTCCAAG CGTTGAGAGT TTGCCTGGAG GAAGAGAATT      120
CACTGGCTCT CCACCTTCAT CTGCTACTAA AAAAGATTCC TTTTITAGCA ACATCTCAGG      180
TTCTCGCTCA CACAGCAAAA CTATGGGCAG AAAAGAATCT GAAGAAGAAT TAGAAGCCCA      240
AATTTCCTTC CTTCAGGGC AGTTGAATGA CCTGGATGCC ATGTGCAAAT ACTGTGCAAA      300
GGTGATGGAC ACTCATCTTG TAAATATTCA AGATGTGATA TTACAAGAAA ATTTGGAAAA      360
AGAAGATCAA ATTCTGGTTT CCCTGGCAGG ATTAAAACAG ATCAAAGACA TTCTAAAAGG      420
TTCCCTGCGT TTTAACCAGA GCCAGCTAGA GGCCGAAGAG AACGAACAGA TCACCATTGC      480
GGACAACCTA CTCGAG      496
```

(2) INFORMATION FOR SEQ ID NO:1286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

```
GAATTCGGCC TTCATGGCCT AGCAGAAGCT AAGAACTGTC TTTAAATAAA TTTTAAAGT      60
AAATAAGTTA TAATGCATAG GTTAGCCCAT TCATTAATGA TTTTCAGTTT CAAGTGTAAT      120
TATTCTTAA TGATTACTAG TTGATCAGTG TAATGAAAAC ATTGAGTAGA CAACTAAAT      180
GCACAGTATA AATGTGACAT AAACACTGGT TTCAATTTGT CTCAAGAAAA AAGAAAAAAA      240
AAAGGCCCTT GCAATGGCAA AGAGTGGCCA CTATTGGGGT AATTCAAACA ACCCACTGTA      300
ATACAGGAAA GCACTCGAG      319
```

(2) INFORMATION FOR SEQ ID NO:1287:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 261 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

```

AAAATGGAGA AGTTACTGGC TGGAGAAGAT GGGACAAGTG AACGAAGGAA AAGCATCAAA      60
ACCTACAGAG AAATTGTTCA AGAAAAAGAG CGGAGAGAGA GAGAGCTGCA TGAAGCATAT      120
AAGAACGCTC GGTCCCAGGA GGAGGCAGAG GGGATCCTTC AACAGTACAT TGAGAGGTTC      180
ACCATCAGTG AGGCTGTTCT CGAACGCTTG GAGATGCCAA AAATTCTGGA AAGAAGCCAT      240
TCAACAGAGC CAAAACTCGA G                                     261

```

(2) INFORMATION FOR SEQ ID NO:1288:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 275 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

```

GAATTCGGCC TTCATGGCCT ACTCTGAAGA TATTATAGC TCTCTTAGAG GTGTCACTGA      60
AGCAATCCAG AATTTCAGCT TCCGTAGCCA AGAAGATATG AATGAGCCAT TGAAGAGGGA      120
TTCTAAAAAA GATGATGGCG ATTCAATGTG TGGTGGTCCT GGGATGTCTG ACCCAAGAGC      180
AGGAGGTGAT GCTACTGACT CAAGTCAAAC AGCTCTTGAT AATAAAGCTT CATTGCTCCA      240
TTCAATGCCT ACTCACTCCT CTCACGCTC TCGAG                                     275

```

(2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

```

GCGATTGAAT TCTAGACCTG CCTCGAGAAC GCCGGGGTCC ATCATTAGCA GTCCTCACAT      60
GCGCCCGAGA GCTACATCAA CACGAGAGTG TCCATCTCGC CCACACCAGA CTATGCCCAA      120
CTCATCTTCC CCCCTCGAG                                     139

```

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

```

GAATTCGGCC AAAGAGGCCT AATAAGTTTG ATTAAGCTTG CAGACATTAA GCTTTTCTAG      60
CAGCTGGTGT GTGCAGAGGC AGATGGCTCT CTGGTTCCAG GACTACCTAC AATATAGAGA      120
AATTTTCTCT ATTCCAGTCA ATTCATCATG GGTAAAGAATA GTCCATTTTG GTAGTGTAT      180
TTCATCGTTT ACAATCTACC TATGGGTAGT GGCTGGTAAC TGCCTGGATG TTGACATTTT      240
ACAAAGGCCA TACTTAACCA CACTTTTATT TCTATTTGTG CGATGCCTTG GAGTAGTTTC      300
CCAAAGTGAT TTTGAGTGTG GAAGAAATGG TATGTCCCC GAACAGCTGG TGGTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:1291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

```

GAATTCGGCC TTCATGGCCT AGAGGATCCT AATGAAATAC CTGAAACATA TATTGGCATT      60
TATCAATGGC TCAAATCTTC ATTTATCTCT GGCCTTAACC CTGGCTCCTG AGGCTGCGGC      120
CAGCAGAGCC CAGGTCGAG                                     139

```

(2) INFORMATION FOR SEQ ID NO:1292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

```

GAATTCGGCC TTCATGGCCT ACTATCAGGA AGTGATTCGT GGAGAGGGGA TTTTACCTGA      60
TGGTGGAGAA TACAAACCCC CTTCTGATTC TTTGAAAAGC AGAGACTATT ACACGGATTT      120
CCTAATTACA CTGGCTGTGC CCTCGGCAGT GGCACTGGTC CTTTTTCTAA TACTTGCTTA      180
TATCATGTGC TGCCGACGGG AAGGCGTCAT CCAACTGGTC CATCACAGTG CTATTGAGAA      240
ATCTACCAAG GAGCTTCGAG ACATGTCCAA GAATAGAGAG ATAGCATGGC CCCTGTCAAC      300
GCTTCCTGTG TTCCACCCTG TGA CTGGGGA AATCATACCT CCTTTACACA CAGACAAC TA      360
TGATAGCACA AACATGCCAT TGATGCAAAC GCAGCAGAAC TTGCCACATC AGACTCAGAT      420
TCCCCAACAG CAGACTCTCG AG                                     442

```

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

```

GAATTCGGCC TTCATGGCCT ACATGAATTA TCTGTGAGTT GGTAAAGGT AATATTGGTT      60
AGCATCAAGA ATAGGAAGCT ATTAGTTTTC AATCAAGAAT AAGCTCAAAT TTGGTCTAAA      120
TCTTAATTTT AAGCTGGGTA ATCATTGATT TACAATTTT TTCTTGGTGT CACATTCTTT      180
CCAAAACAAT AATCAATGAA GCCTTCCCA CCTGTGCCT TTGCTCTCGA G                231

```

(2) INFORMATION FOR SEQ ID NO:1294:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

```

GAATTCGGCC TTCATGGCCT ACTCTGCTAA CTCCTGCCT CTATGTCTTT CCCACCTAC      60
CTCCTCTCCC CATTCACTACT CCTGCGTGAC CTCATCCATT TACCTGCCTT CAATTAGCAT      120
CCATACGTTT CTCCTTCTC AATATAAGTC CCCAGCTGAG ACTCTGTTTC TGAAATCCAG      180
ATTTTATTTT CCAATTCTAC TGAACAACT CAGTCTAAAG CCAAGCCCAT TATCTTCTCC      240
TATAAGCCTG CATCTTTTCT TTTCTTTCTT TCTTTTTTTT TTTTAAACAG AGGTTAATGG      300
CATTCAACAT CTACCAAGC ACCAGGGAGT TAGATTGAGA ACGGATGGAC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:1295:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 429 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

```

GAATTCGGCC TTCATGGCCT AGGCTAACTG TTATTTGCAT CTTACAGCTC AGAAAACAAG      60
CATGGTGAGA TAAGGAACT TTAATAAGGT CACATAACTA GTAAGTGGTG GAGCCAGCGT      120
TGAAACTCAG GAAGTCTGTA CAACTGGG AGGGAAGGCT AATATTTGAA ATGATAGACT      180
CAACATTCAA TATTTAGTA TCGATGAGCT CTAAGTTGAT AGAGCTATGT GTAAAAACCC      240
TGCATTTAAT ATTAAGAAAT CATTGGCAGA AGAGTAAGAG AGGGCTTTGG TCAAGTAAGC      300
TGAGTGCATA AGAAACTCT GGCATTTGAG GTGTCCTTAG CTCAGATGC TTTGGTAGGG      360
CAGAGTGTAT CCATGGAGGT ACCATGAGCT ACCATGGAGG TAGCTCAGAG AGGAAAGGGA      420
AACCTCGAG                                     429

```

(2) INFORMATION FOR SEQ ID NO:1296:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

```

CTCGAGCTGT TCTGTAAATA CCTGGTGCTA ACATCCCATG CCGCTCCCTC CTCACGATGC      60
ACCCACCGCC CTGAGGGCCC GTCCTAGGAA TGGATGTGGG GATGGTCGCT TTGTAATGTG      120

```

CTGGTTCTCT	TTTTTTTTTC	TTTCCCCTCT	ATGGCCCTTA	AGACTTTCAT	TTTGTTCAGA	180
ACCATGCTGG	GCTAGCTAAA	GGGTGGGGAG	AGGGAAGATG	GGCCCCACCA	CGCTCTCAAG	240
AGAACGCACC	TGCAATAAAA	CAGTCTTGTC	GGCCAGCTGC	CCAGGGGACG	GCAGCTACAG	300
CAGCCTCTGC	GTCTTGGTCC	GCCAGCACCT	CCCGCTTCTC	CGTGGTGAAT	TGGCGCCGCT	360
TCCTCACATC	TGTGCTCCAT	GCCCCTAGGC	CTCTTTGGCC	GAATTC		406

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 639 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

GAATTCGGCC	AAAGAGGCCT	ACGCCCCGCA	ACACGCCTGG	GTAATTTTTT	GTATTTTATG	60
TAGAGACGGG	GTTTCACCGT	GTTAGCCAGG	GTGGTCTTGA	TCTCATGATC	TCGTGATCCA	120
CCTGCCTCGG	CCTCCCAAAG	TGCTGCGATT	ACAGGCAAGT	GCCACCGCAC	CCGGTGACAC	180
TGTTGCTCTT	AAGCAGAAGC	AAAATCAAAA	GGCAGACAGG	ACTCAAAGAA	TGGTTCTAAA	240
CCTAAAAGTA	CTAAGGCCTC	TAGGAATAT	GATGATGACA	ATTACTGTGC	AATTTATATC	300
ATGCTGAATT	TTAGTAAAAC	CCCTGGCAAA	CCACTCTCAC	TTGGTGACAC	TCCGTCCACA	360
GCACGGGGCC	ACAGCATAGT	GGATCAGTAC	AACCTTCCTG	GACAGCCTTG	CTACCTGTAC	420
ACTCTTATGG	ACTCAATCC	ACTTCAATGT	ATTGCTTCTA	GAGGTAAATG	GACATGTGAA	480
CACAGATTCA	CAGGCAAGA	TGTTTATATG	CACCACTGTC	TTGATGTTCA	AGAAAATGGA	540
ACTGGTTACA	TGCATGTGAT	TAGCTATATA	ATGTAAGTGT	ATTCAGCCCC	TAAAAAATGT	600
AGGCCTCTTT	GGCCGATTGA	ATTCTAGACC	TGCCTCGAG			639

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 606 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTCC	AACGGCATCG	ACGTGTACCC	CCAGAAGGAA	60
TTTGATGAGG	ACTCGGAGGA	CCGGCTGGTG	AACGAGAAGT	TCCGGGAGAT	GATCCCATTT	120
GCTGTGGTGG	GCAGTGACCA	CGAGTACCAG	GTCAACGGCA	AGAGGATCCT	TGGGAGGAAG	180
ACCAAGTGGG	GTACCATCGA	AGTTGAAAAC	ACCACACACT	GTGAGTTTGC	CTACCTGCGG	240
GACCTTCTCA	TCAGGACGCA	CATGCAGAAC	ATCAAGGACA	TCACCAGCAG	CATCCACTTC	300
GAGGCGTACC	GTGTGAAGCG	CCTCAACGAG	GGCAGCAGCG	CCATGGCCAA	CGGCGTGGAG	360
GAGAAGGAGC	CAGAAGCCCC	GGAGATGTAG	ACGCCACCCT	GCCCCACCCC	GGGATCCTGC	420
CCCCAAGTCA	TTTCCGTCCC	CCCCCAGGC	CCTCCTCCCA	CGGAGTGGCA	AGACTGGCTG	480
AGGCCTAGCT	CTCTAAAACG	GTGGGGGAGG	GGGGAGCGCC	CTGAGAGAGG	CATTCTACTA	540
ACCCACCCCC	AATCACCCCT	ATTTTACTC	TTTCTACTTT	CGGAATTGGA	AAGAACGACA	600
CTCGAG						606

(2) INFORMATION FOR SEQ ID NO:1299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

GAATTCGGCC AAAGAGGCCT AGGAGTGATG TTCATTTTGG GATTTCGAGG GTGCATTGGA	60
GCGCTACGGG AAAACACTTT CCTTCTCAAG TTTTCTCTG TGTCCTGGG AATTATTTC	120
TTCCTGGAGC TCACTGCCGG AGTTCTAGCA TTTGTTTCA AAGACTGGAT CAAAGACCAG	180
CTGTATTCT TTATAACAA CAACATCAGA GCATATCGG ATGACATTGA TTTGCAAAAC	240
CTCATAGACT TCACCCAGG ACTCGAG	267

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

GAATTCGGCC AAAGAGGCCT AGTGTCTTCC AATCAAGTTA ATAAATATCT GTCTTCGTAC	60
CAGGAAAAAT TCAATATTAT TTTAAAGGAG AAAAAATAAG AATGTATTGG TAAAATGCTT	120
TCTCTCACTT CGAAATATCT TAGTGAACAA GAACACTGAC ATAGAATTAA AATTCTATGA	180
ACAGCCATAA CCAAAGGAAT CTCATTTAGT GAATATTTAT GTCCAGTAAC TGCAACCAC	240
ACTTAGAGCT ATCCTTTTGC TTAATAACAA AAATTTGGGC CTTAAGAAGT GATTAATATC	300
AGGCAAAAT AAATTATACT TTTGTTTATT TATTCAGGGC CTTGCTCTGC TGCCAGGCT	360
GGACTGCAGT AGTGCAATCA TAGCTCACTG CATCCTTGAA TTCCTGGGCT CGAG	414

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

GAATTCGGCC AAAGAGGCCT AGTGAAGTTT ACTGTGATT TATGGAACAA TTTGGACAAG	60
AAGAGTCTTT AGACAGCTTT ACGTCCAACA ATGGACCATT TCAGTATTAC TTGGGTGGTC	120
ATTCCAGTCA ACCCATGGAA AATTCTGGAT TTCGTGAAGA TATTCAAGTA CCTCCTGGAA	180
ATGGCAACAT TGGGAATATG CAGGTGGTTG CAGTTGAAGG AAAAGGTGAA GTCAAGCATG	240
GAGGAGAAGA TGGCAGGAAT AACAGCGGAG CACCACAAC CGAG	284

(2) INFORMATION FOR SEQ ID NO:1302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 193 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

GAATTCGATT GAATTCTAGA CCTGCCTCGA GCCTGTGCGA GAAAAGTGAA CGCCAGTCTA	60
AAAAAAAAAA AAAAATCTAA AAGAAGCCAA AAATCCACTT GTAATGAGAT TCATAGACCC	120
CTTATTTATA CAACTCACAT ATTTGAATTT TTACATATTG AATTTTCTTT TAAAGGGGTG	180
GAGGGGTCTC GAG	193

(2) INFORMATION FOR SEQ ID NO:1303:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

GAATTCGGCC TTCATGGCCT AGGGATACAG CAACTATTTT ATCAATTGTT TGTATTTCCC	60
TTTAAGGTAA CATTTTAAAT GAAATGTATT ATATTTTAAAT CTATCCTTTT CCTTTGTTTT	120
TGTTCTTATT ATCTCTTCTG ATATATAACC AAAAAATGAA AAAATCTGTA CACTTGGTGT	180
TTGATTTACC TAAGCACCTA GTTAATTTAA TCTTTGTAAC ACTTTGGATG GTTAACCTAA	240
CCTTTACTCA AGTTGGTTTT TGTTTGTTG AAAATGACTT ACTTGGTGGA ACCACTACTC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:1304:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 416 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

GCAGCGAGCA GTATACCAGC AGCAGCAAGC GAAAGGAAGA GTTTGCTGAT ATGTCAAAAG	60
TTCAATCAGT GGAAGCAAT GGGCTTCTGG ACTTTGATTC AGAATATCAG GAGCTCTGGG	120
ATTGGCTGAT TGACATGGAG TCCCTTGTA TGGACAGCCA CGACCTGATG ATGTCAGAGG	180
AGCAGCAGCA GCATCTTTAC AAGCGATACA GTGTGGAAT GTCCATCAGA CACCTGAAAA	240
AGACGGAGCT GCTTAGTAAG GTTGAAGCTT TGAAGAAAGG TGGCGTTTTA CTACCAAATG	300
ATCTCCTTGA AAAAGTGGAT TCAATTAATG AAAAATGGGA ACTGCTTGGG GTATTGTCAT	360
TTTTATTACT GTTGTAGGT TATGTGTACA TTTTGTGCGT AGTGAAGTCA CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:1305:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

```

GAATTCGGCC TTCATGGCCT ACCAATGTCC TGCACATTGC CAGACTTCCA AACAGGTACA      60
AGTTCCCATC TGTTCCTGCAA TAGATGAAAG CAAGTCACAG TCCCAGGGC TACCAGTGTA      120
ATTTCCTCAAG TGGCCAAGTT ACCTGGCTTC ATGGCTTGAC CTGCTGTGTT CTTTGGAAA      180
TGGAGAATGC CTGAGGGCTG TCTCTAACAG AAGGGTATGT GGCAGTATAT TACAGAATTT      240
ACAAGAAGCA AGGTGCAAAT GAATTACATT GAATTCATT GTTAAGAAGA GATGATTTAA      300
AATTTGGTAT TTAACAACAT AAACGACTTT GGGGCCCAAC TCGAG                      345

```

(2) INFORMATION FOR SEQ ID NO:1306:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 209 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

```

GATTTCTCTC AGCTTTTATT TGTGAAAA ATTTTAAAT TCACCTTCTT TTTGAAAGA      60
TTTTACTGA TTATAGAATT CTAAGTAGTT TATTCTTCTA GGACTGTGAA CATATAATTC      120
TACTGTCTTC TGGCATTAT AGTTCTTTA TTTATTTT TATTGAAAA CATTTTTTTT      180
GAGACATGGT CTCACTCAGA ATACTCGAG                      209

```

(2) INFORMATION FOR SEQ ID NO:1307:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 251 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

```

GAATTCGGCC TTCATGGCCT AAGCTTTTGC TTTTAAATA ACTGTATAG CTAAAACTT      60
GACGGTGAAA AGCTCTCAGA TCAAAGCTGA TCCTTCTGTC AGTAATGATT CTAAAAATA      120
GCAAGATTTT AATGGGGAAT ATATTTTATT TCATTCTTAT CTCAAACCTA GGTACTGTGG      180
TCGTTTTGAG TTCATTTTCA GGCATTTTCA ATGTGCCTCA GGCCACATCC AACCTCTCCC      240
CAGAACTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:1308:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

```

GAATTCGGCC TTCATGGCCT ACCTGACTCT TGAGATACTG ACTGGAAGAT AGACTGTTTT      60
GTTCCACCTG ATTGTATGGG AGAAATTTT GACCTTAGAA AGTGGAATG AGGTTGCTAT      120
GGAACTGGT AATTCTGCTG CCACATGATG ACTCTTCTGC AGGTGATGGT CTTTAAAGCC      180
GTCCTATTTT TACTCAGGAG CCACATGATG TCATTTTCC TTTGGATTGA TCAAAATCTG      240
AGGTCATCCT GAATTGTGCT GCTAACGGTT ACCCTTCGCC TCATTATAGG TGGAAGCAAA      300

```

ATGGCACAGA ACTCGAG

317

(2) INFORMATION FOR SEQ ID NO:1309:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 412 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

```

GAATTCGGCC TTCATGGCCT ACACAGTATC ACTAAAAGAT TTTCATTCGG AAGATCACAT      60
TAGTAAAAAG ACTGAGGAAG TGGTTC TGAA AGATGGAAGA ATTGAAAGAC TAAAGTTAGA      120
GCTTGAAAGG AAAGATGCTG AAATCCAGAA GCTGAAAAAT GTAATCACTC AATGGGAGGC      180
AAAGTATAAG GAAGTAAAGG CAAGAAATGC ACAATTATTG AAAATGCTTC AGGAAGGTGA      240
AATGAAAGAT AAGGCAGAAA TACTTCTGCA AGTTGATGAA TCACAAAGTA TCAAGAATGA      300
GCTCACTATT CAGGTGACTT CACTTCATGC TGCATTAGAA CAAGAAAGAT CTAAAGTGAA      360
AGTATTACAA GCAGAGTTAG CCAAATACCA GGGTGGCAGA AAAGGGCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:1310:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 239 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

```

CTCGAGTGTG GTGGTATGTG AATTATATCT CAGTAAAGCC ATCACAGGGC AGAAGAAAAA      60
GAGAAAAAGAA AAAGAAAACC TTCGAGGAAG TCCAACAAAA AACATGAGGA AGAAAAGGTG      120
AGAGCCTGAG GATCCACACA GCAGGTACAG CAACTAACTG ACAGAAATTC TAGAGCCAGA      180
CAACAATGAC TAATCAAACCT AACCTCAAAA CAAATGATTA GGCCATGAAG GCCGAATTC      239

```

(2) INFORMATION FOR SEQ ID NO:1311:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

```

GAATTCGGCC TTCATGGCCT ACAAGGAAGC ACAAGGAGAA AATTATGATG AAATGGAGCA      60
AAACAGGTAA GAGAGAGGGT CAGAGAAGTG AATGTGGGCC TTGATGCTGA AGCCATTGGA      120
GGGTTTTCTG TTGAGGAGGA GTATGGGAAT GATATGATCT GACTTATGTT TCAAAAAGTG      180
TACTCTAGCT GCTTTGTGGG AAATATNGGA GGGAGAGAGC AGAATCAAGG AGGCCATTTA      240
AAATGCCATT GCAAATATCC AAGAGAGGCG GACTCGAG                                278

```

(2) INFORMATION FOR SEQ ID NO:1312:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

```
GAATTCGGCT TCATGGCCTA ATCACATATG GTAGAGATT TATACAGAAT TTTAAAATGT    60
GGCATTAAAA AAACCTGTTC CATGGAAAAC TGCTTTCAGA GATTTTAAAT AAGTGTTCCT    120
CTCACATAGG AACCTAAGCT TCTCAGAGCT TTTAATAGGC TTCTAACAGG CTAATAGTCA    180
AGGCCGTGAC CCAAGAAGGG ATATAGTTCA CAGTGTTTTC CACAAATATT TCACCCAGAG    240
GCTCGAG                                           247
```

(2) INFORMATION FOR SEQ ID NO:1313:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 311 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

```
GAATTCGGCC TTCATGGCCT AGGGTCTTAG CTTTGGCTCT CCTTGCAAAG TTATTTCTAG    60
TTAATTCATT ATGCAGAAGG TATAGGGGTT AGTCCTTGCT ATATTATGCT TGGTTATAAT    120
TTTTCATCTT TCCCTTGCGG TACTATATCT ATTGCGCCAG GTTTCCTCTG TCTCAAAAAA    180
AAAGAAGTTA CTTCCAAGAC AGACTTTTAA GATGTAACCA GCACAAAGCA ATGTCAGGGA    240
GGAGTGATAC ATGACAATAA ATGAGTCAGA TGAGCAAGAA GGCCCCAGAA CCCATGCCCC    300
CAGGACTCGA G                                           311
```

(2) INFORMATION FOR SEQ ID NO:1314:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 261 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

```
GGGGAGCTGC AAACGCCCCG GATACTGTCA GAGATGGAGA AAGGTATGAC AGGAAGAGCA    60
GATCAAGAAG ACGGGAACAG CACGAGGCAC TGGGAGCTGC AAACGCCCCG GATACTGTCA    120
GAGATGGAGA AAGGTATGAC AGGAAGAGCA GATCAAGAAG ACGGGAACAG CACGAGGCAC    180
TGGGAGNTGC AAACGCCCCG GATACTGTCA GAGATGGAGA AAGGTATGAC AGGAAGAGCA    240
GATCAAGAAG ACGAACTCGA G                                           261
```

(2) INFORMATION FOR SEQ ID NO:1315:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

CTCGACTTGC	ACGAGGAGTG	GCAGGATTAT	CTGCAGAGGG	ACCATTGGGA	CAGCTAGTAA	60
GGCCAGGTGC	TCTTTAGGCA	CCCCTTCTTC	CACCAGCTTC	AGGCCTGTCA	CAGCATCAGC	120
TGCTGAGAAG	CCAATCTTTG	ACGTTAGAAT	CAGAAGGCAA	AAGGCCAGAA	CTGCTGGCAT	180
TTTTATAATT	GAGAATAGCA	GCTTGTAAAT	GTCTGTGATC	CCTTGGGTCT	CTTCTTTTAC	240
TATTGACGCT	TCTCTGTTT	CTTTTTTCAG	AAGGGCTACT	AATGTTGTTG	TTATTAAAAA	300
TACAGTAGGC	CTCTTTGGCC	GAATTC				326

(2) INFORMATION FOR SEQ ID NO:1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

GAATTCGGCC	TTCATGGCCT	AACGTCACCTC	ACTGTCCTTC	TTAGTATCTA	ATTCTCCTTC	60
ACCTAATAGA	ACAGCAAATT	CTTTGAGTTT	AGGATCCTTA	ATGCAGTGTA	AATATTGCCT	120
TTTATCCTTC	TTCTCAGCTA	TGGTCTCAAT	TCAAATCATG	AGGACCATTG	TGGTGGCTCC	180
CGAATGGCCT	CACTGTTCCA	CTCCTTCCCC	ACTGCGCTAC	AGTCCATTCC	CCAGTGTCTT	240
CGAG						244

(2) INFORMATION FOR SEQ ID NO:1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC	TTCATGGCCT	AGAAAGGTTT	GCCTGGTAAG	ACTGAACTGT	TCATAGTTCT	60
TTAAATAAGC	TACAATATTT	CCTAATTGTG	TACCCTTGAT	TTTACTGTTT	TCTTGCCCTA	120
GAATGCTGTT	TCTATCATTC	TTCATCGAG				149

(2) INFORMATION FOR SEQ ID NO:1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

```

GAATTCGGCC TTCATGGCCT AGTCAGCAAA GCAAGGGGAG GCAGACCACA GGCCTCATGA   60
CTCTCACTGG AGTGCAATGG GACCCCATG GGGTGAAAGC AGAGGAGTGA GCTGCTCTGA   120
TGTGAGCACT CACTCTGCTT GCCATATAGT GAGTAGACAG GAGAGACCAG GGCAGAAGTA   180
AGAAGACCCA TCAGAGGCTC CTCAGGAACC CGAGTGGGAG ATGGTGGTGG AACAGGGTTG   240
TAGTAGTGGC AGTAGTGAAA AAATGATCAG GTTTTGGAAA TATTGGAAG GTCGAACTCG   300
AG                                                                 302

```

(2) INFORMATION FOR SEQ ID NO:1319:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 219 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

```

GAATTCGGCC TTCATGGCCT AAGAAAAAAA GAAAGAAAGA AAAAGAAAG TACAAGTTTA   60
TAAAGTATTA TAGTGAAAAA TTCGCATTCT GGCTGATTTT AAGCCATTTA AAATTTATAT   120
AAAACAACCT TCCATAAAAA TTTGACAGGT GCCCAGATGT TGCTTCTCC ATTTATTTT   180
TGTTTTTTTT TAATCAGAGT GGTCTTGAGG CAGGTCGAG                               219

```

(2) INFORMATION FOR SEQ ID NO:1320:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 361 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

```

GAATTCGGCC TTCATGGCCT ACTGAGTTAG GTTTTATTAA TGCAGTTTTT ACAGATGAGG   60
CTACTGTGAC ACAGAGGGCA TAAACTTGTC AAAGACATGC AGCAACAGG ACAGACAAAT   120
CTGAAGCCAG GTTGTCTAAG CTCAGAATCC ACACCTATAA CCGCTGTACC CCACTGCTTT   180
TGCCAGCAGG AGCTCACGTA CTTAGGACAG ACAATCAGTA CAGTGCTAGG CTCACTGAAG   240
GTGTTGAACA AATGTCTGTT CACTCTTTT GTTCTCAAAA GTACCAGGAA AGGCCAGAAG   300
AAAAAACTAC AAGACTTAGA AACTACAATG GATCAGATCA CTCAGTAGCA CCTCACTCGA   360
G                                                                 361

```

(2) INFORMATION FOR SEQ ID NO:1321:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 66 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

```

GAATTCAAAC GAAAGCCAGC TGAGAATACA GGAAACATGT TTCCAGCCAA ACCCAAAACA   60
CTCGAG                                                                 66

```

(2) INFORMATION FOR SEQ ID NO:1322:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

```
GATTGAATTC TAGACCTGCA GCTACAGAAG TCAAGATTCC AAAACCAAGA GGCAGACCCA    60
AAATGGTAAA ACAGCCCTGT CCTTCAGAGA GTGACATCAT TACTGAAGAG GACAAAAGTA    120
AGAAAAAGGG GCAAGAGGAA AAACAACCTA AAAAGCAGCC TAAGAAGGAT GAAGAGGGCC    180
AGAAGGAAGA AGATAAGCCA AGAAAAGAGC CGGATAAAAA AGAGGGGAAG AAAGAAGTTG    240
AATCAAAAAG GAAAAATTTA GCTAAAACAG GGGTACTTTC AACCTCCGAT TCTGAAGAAG    300
AAGGAGACGA TCTCGAG                                         317
```

(2) INFORMATION FOR SEQ ID NO:1323:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 106 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

```
GAATTCGGCC TTCATGGCCT ACTGTAAGGA GGAGATGAAA GAATTAGTAG AAAAGGTTTT    60
AAAAACAGTT ATTATACTA TATTCATAT GCTGAAGGCG CTCGAG                     106
```

(2) INFORMATION FOR SEQ ID NO:1324:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

```
GAATTCGGCC TTCATGGCCT ACTCCTTTAT TTCCTTTGTC TGTAGAATAA AGTCTTAGAA    60
TAATATTCCT GTTAAGGCCG TGCTTATCCC AATACCGTAT CCATACTGAA CTTTCAGTTC    120
TTTATATGCA CTCTACTCTC TGTCTTTCAG ATTTTTCGAG GTATTCCTTT AGAACACTCT    180
TTCTCTTCCA TCTTATCGCC TACTCTTTGG GTTCTGTTT AACATTACA TTTCTCGGTG    240
GGGGGGCTTA TCTCGAG                                         257
```

(2) INFORMATION FOR SEQ ID NO:1325:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 78 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

CTCGAGACCG CAAGCACTTC CCACCTCATC CTTATTTCTT CTATCCCTTT TCATTGTTTT	60
TTTCTCCTTT TTAAATTC	78

(2) INFORMATION FOR SEQ ID NO:1326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

GAATTCGGCC TTCATGGCCT AGAATTGTCC TCTGTGGAAG GGACTTTCTT TTGGCCCTAG	60
GCCCTTCCT GCCCTGTCTG TCAGCAGAGA GATGGAAAAC TTGATGACTA GCTCCACCCT	120
ACCGCCCTT TTTGCAGATG AAGACGGTTC CAAGGAGAGT AATGATCTGG CTACCACTGG	180
GTTAAATCAC CCAGAGGTTT CATACTAGT TGGCGCCACA TCATCCACCA ACAATCCAGA	240
ATTGTGGAG GATCTCTCTC AAGGTCAGTT GCTTCAGAGT GAGTCTCAA ATGCAGCAGA	300
AGGCACCTCG AG	312

(2) INFORMATION FOR SEQ ID NO:1327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

GCGATTGATT CTAGACCTGC CTCTCCTTCA AGCATTGCAG CAAACAATTG TACTGTGAAT	60
ACGTCATCAA TTGCAACGTC TTCAATGAAG GGTCTTACGA CTACAGGAAA CTCGTCTCTT	120
AATAGCACAT CTAACACTAA AGTATCAGCA GTGCCTACAA ATATGGCTGC CAAGAAAACA	180
TCTACCCCA AAATAAATTT TGTGGTGGT AATAAGCTGC AGTCAACAGG AAATAAGCA	240
GAAGACACAA AAGGAACCGA ATGTGTTAAA AGTACTCCTG TCACTTCTGC TGTGCAGATT	300
CCTGAAGTAA AGCAAGACAC AGTGTGAGAA CCAGTCACAC CTGCATCTCT TGCTGCTTTA	360
CAGAGTGATG TGCAGCCAGT GGGCCATGAT TATGTGGAAG GGATACTCGA G	411

(2) INFORMATION FOR SEQ ID NO:1328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

GAATTCGGCC	TTCATGGCCT	ACTTTTTCCT	TGGTCAGATC	ACAATGCTCC	TATAAATGTT	60
TCACATAACA	TGCTTACTTG	TGGGTATACC	CTCCTTATCT	CCTCAGGGGC	TAATTTTGGG	120
AAGGGACTAC	TGTCCTTACT	TTAAAGTTAA	ATATAAACTA	AATTCCTTCC	CTAGTTAGCT	180
CAGCCTACGT	GCAGAGATAA	GCAAAAGTAG	TTAACCTAAA	AGATATCACC	CTTTGGGGGG	240
TGTCAGAGGC	AAAATAGAGT	CAGTCATGCT	AAGCTCCCCT	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:1329:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

GAATTCGGCC	TTCATGGCCT	AGGGGGATTG	AAGATTTTT	GTAGGTGGAA	GGCCTGAAGT	60
GCGACTAGAG	GGCAATAAAT	TCAAGTGGG	AGACTGTCTG	CTGATGTTCA	TTCCACTGGG	120
CTGTTTATGG	ACTGGGCTGT	TAGTGCTGGA	GTGGCTACCC	TGGGCAACTA	GTGCATTTGG	180
ACTGGA ACTA	CTTGGGGATA	CAGTAGGCTT	GGGAGTTGGG	TTGGATTTAG	AAATAAGTTT	240
AGTTGATACT	GAAGGCTTAG	CTGACAGAGA	GGGCTTGGGT	GAGGCAGAAG	GCTTAGGCCGA	300
GGGCAGGGGT	TTAGGAGATG	TGGCAGGTCT	AGAATTCGAG			340

(2) INFORMATION FOR SEQ ID NO:1330:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

GAATTAAAGA	GGCGGATATC	ATCACACTCA	CTAACCAAAT	TGATGAGAAC	TGGTATGAGG	60
GGATGCTGCA	TGGCCATTCA	GGCTTCTTCC	CCATCAATTA	TGTGGAAATT	CTGGTTGCC	120
TGCCCCATTA	GGATGTTATG	CTGGCTGGCT	CGCCTCCTCT	TGACCCAGAT	AGTTACGGTT	180
AACCACTGCT	TTGGCAATGC	TGCTTATAAC	ACATCCCAAG	TGCAGGCCGC	AGTGGTCCAC	240
GTCCATCCAGC	CCCACCAAGT	GACTTTGGTT	GACTTGTGGG	CTCCACAGG	ACTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1331:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

CTCGAGTCCG	CTGAGCTGAG	AAGCACTGCG	ACTTTTCCGT	GACAGACCAA	CGATAGCTAC	60
CATTTTGGCA	CCAAGGCTAG	AGCGCCGCTT	TTTGCCACTG	GTGCCCCAAG	TGCCCCACTGC	120
AGTGTCAGAC	TGGCTGCCAT	CATTCTTCTC	CAGTGAGCAC	ATGTCTCCAC	TGATGTCTGGT	180
GCTTTTGTGC	ATGTCTTCTC	CTGATATGCC	CATTGTCTG	CTTTGCATTT	TGGATGTAAA	240

GACACTGTCA GCCGATGGAT CATTAAAAGT GAGGACAAGA GTAAAAAGGA AAAGACAGAA 300
AATGCATTTT AGATAAAACA TTTGGAGTAT AATTTAGGCC ATGAAGGCCG AATTC 355

(2) INFORMATION FOR SEQ ID NO:1332:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 438 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

GAATTCGGCC TTCATGTGCG GTGAAGGTCC TGTGATTGTA CAGTTAGCAC ATTTTATATG 60
ACAGTATAAT CTTAAAAAAT AACATAGAAA CAGAAACATT AGAAACGTAA GTCACAGTTT 120
GTGAGTATGT CATTTTITAG GGAAAAATAA AATATAGTAA CGATTATGA GGCCCCAAAG 180
TTTATATAAA AAATGAAAAA GCTGTTTGGC AGTTAGGACT GACTGTAGCC TTCTGTCAAA 240
TCAGTCTTGA CAACTGTAA AAGACATTAT CATCACAAAT AGGGCTGCAT TTCACTCTGT 300
CTGTCAAATA CAATCAATAT ATATGACTTT AAGAAAGTGT GACCATTTTC CCAGAGTGAC 360
ACCAACAAGA TGGTGAATA GGAATTTTGT TTTAACTTTA CTCACCTCAC AGAAATCCAA 420
CTAGCAACTA ACCTCGAG 438

(2) INFORMATION FOR SEQ ID NO:1333:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

GAATTCTAGC CCCACCCACT TTCTCAGACA TCCCCACCGG AGGATCCCAT CAGTCACAAAT 60
CCTCACTAAT TAGACCATTC AAATTCCCCA AAATAAAAAA AGGGAAAGAG GTATAGACTT 120
ATCTTAAGGG TCTTAAGTTC TGGCATTITT CTATTTAATA ATATATATTG CTATAAAATG 180
GAATTACTAC CAAAATTTAG AAAATCTTTT AGCAGAAGAT ACAGCCCTAA TCTTACCACT 240
CCAGTACAAAT CATTATTGAC ATTTATGATG TACTTCGTTA TAGTATCAAA ACAATTCCAG 300
TATGTGAAC 309

(2) INFORMATION FOR SEQ ID NO:1334:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

GCGATTGAAT TCTAGACCTG CCTCGAGCTG CCGTGTITTT CATTTTAATT GTGTGACATA 60
AAATGTAAAA TGTACCCTCT AAACCATTTT TTAGTGTTCA GTTTTGTTGGT ATTAAGTACA 120
TTCACATTAT TGTGCAACCG TCCCCACCAT CCATTCACAG AACTCTTTCA ACTTGCAAAA 180
CTGAAACTGT ATGCATTAAG CAATAACTAT CCCTTCCTTC TTTCTCTTC CCCAGAGCTC 240

GAG

243

(2) INFORMATION FOR SEQ ID NO:1335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

```

GAATTCGGCC TTCATGGCCT AATTCTGGGA AACTGAGAG AAAAATCTGA GGCCATCCAG      60
AAGGAACTAG AACAGACCAA GCAAAAAACA ATCAGTGCGG TTGGTGAGCA GCTCCTGCCC      120
ACAGTCGAGC ACCTCCAGCT GGAGCTGGAT CAGCTAAAGT CAGAGCTGTC CAGCTGGCGA      180
CACGTGAAGA CCGGCTGTGA GACAGTGGAT GCCGTACAAG AAAGAGTGGA CGTGCAAGTC      240
AGAGAAATGG TGAAACTCCT GTTTCCGAA ATAGCTCGAG      280

```

(2) INFORMATION FOR SEQ ID NO:1336:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGAAT TCGGCCTTCA TGGCCTAGAC      60
TAATCTTACT GTAGAAATGA TGTGAGATTC TTGTTTGAAT ATTTTAGAGC AGATTCGGTA      120
TCTAATGGGA TTCCATCTTG ATGTACAGAG CACCTTCTAC ATAATGAATT TTGCATTCA      180
GATGGATGAA GCCTTTAACA CAGACAGAAT TTTAAGTATT GCATATTTCT GGAAGAAAAG      240
CATTGATCAC ATCCTCCTTA GATATTTAGT AATACCTCGA G      281

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(2) INFORMATION FOR SEQ ID NO:1337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

```

GAATTCGGCC TTCATGGCCT AATATTTAGG TAAAAAGGTA AACTAGTACA CCTACCAGAA      60
AAGATAAATA TTAATTTATT GCATCTCTGA CATGAGAAAA AAAGCCTTTA TGTTTTACTG      120
TTTTTTTCTA ATTTTCTTTT TTCTTTTTTT TTTCACATG AATGTTCTCG AG      172

```

(2) INFORMATION FOR SEQ ID NO:1338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

GAATTCGGCC TTCATGGCCT ACTGTATTTT ATAGTGAAGT GTTCATAAAC TAAAGAGTCA	60
TTGATTTGGT TTCCTGGCTA ATTAAAATCT GAATTCATT TGAAGTTCCA TTGAAATCAT	120
GGTTTACTC TATAGCAGTG GATGTTTTT CCCAACCTT CTGATATTTT TTCCTTCCT	180
GAGACAGGT CTTGCTCTGT CACCTGGGAT GGAGTGTAGT TGCACCAAAC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:1339:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 148 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

GAATTCGGCC TTCATGGCCT ACTTGTTTTT AAAGGCATAT GTTGTTTTAT TGTGCTTCAC	60
AGGTACTGTA TCTTTTTTA CAAATCTAAG TTTGTGGCA ACTCTGTGTC AAGCAAGGCT	120
ATTGGCCCCA TTTCCCAAC AAGCAGC	148

(2) INFORMATION FOR SEQ ID NO:1340:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 257 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GCCTGTGTGA AGTTTGACT TTAATCTACC AGATCACTCC TTCACCCTCC ATAAAGATGT	60
CTGAACCTGA CACTTCCTCA GGATTTTCGG GAAGTGTGGA GAATGGAAC TTTCTTGAGC	120
TGTTTCCAC ATCCCTGTCC ACGTCAGTGG ACCCATCCTC AGGCCACCTG TCAAACGTCT	180
ACATCTATGT GTCCATATTC CTCAGCCTTT TAGCGTTTCT GCTTCTGCTT TTAATCATG	240
CCCCCAGAG GCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1341:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 259 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:


```

GAATTCGGCC TTCATGGCCT ACTATAAAGT ACTCTCGCTG GTATTGTCAG TATGTGTGTT      60
AACAAACAATA CTTGGTTGTA TATTTGGGTT GAAACCAAGC TGTGCCAAAG AAGTTAAAAG      120
TTGCAAAGGT CGCTGTTTCG AGAGAACATT TGGGAACGTG CGCTGTGATG CTGCCTGTGT      180
TGAGCTTGGG AACTGCTGTT TAGATTACCA GGAGACGTGC ATAGAACCAG AACATATATG      240
GACTTGCACC AACTCGAG                                     259

```

(2) INFORMATION FOR SEQ ID NO:1342:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

```

GAATTCGGCC TTCATGGCCT AGTCCTTGAC TCTGGAGTTT TACAAAGCAG TCACATTTC      60
AATAAAAGTC TGGGAAAGCA ACACATCATC GCCAACTTTT AATTTTGCTA AATAAGGATA      120
TTAGAAAAG AATAGAAAAT TGCACTCCCT TACTGTTTAA AGAAAAACCA AAAGAAAGTTA      180
AAAAAAAAC AACCTCATTA TGTGTCTTT GTTTTGTGTT TGTTCCTTT CCTTGGAAT      240
CAGTGAAAGT TTGTCAGCC ACCTCGAG                                     268

```

(2) INFORMATION FOR SEQ ID NO:1343:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

```

GAATTCGGCC TTCATGGCCT AGCCATTAA TATACTAAAA CAGTGTGTA AATTAACTTT      60
GGTACAAATT GCCAGTCATC TCTAGATCAT TTTAAGCATT TTAAGAATAT TTATTATCAA      120
TCTAAGTACA GAAGAATAAC TGCCAGCAGT GATTATTTGC TTTGGATTAG AGTTTTTAAA      180
AATCCACCTC ACTGAAATGG TTATGTTTAT CACAGTTTGC AAGGTTTGTG TGTTCCTCGA      240
G                                     241

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(2) INFORMATION FOR SEQ ID NO:1344:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 313 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

```

GAATTCGGCC TTCATGGCCT ACCCATTCCT TCCTTCCTGC CTGGCCTGGG CCCCTCCTGC      60
ACAGATGGCC TAGGTACCCA GCCTGGAGGC CAAGGCTGGA TTCCCAGAGT CTGCCCTGGT      120
GGAGTGGGAA TAGCAGGTTT TCTGCAACTC AGGGGAGCTG CCCTGCAGGG CTTCCACAT      180
GTGCTCAGGC CCCTGTGCCA GGTCTGGTGA TGCTTCCTCC TTGCCTTTCA GGATCTCCTA      240
TTGCACAGCA GACAAGATGC ACGACAAGGT GTTTCATAC ATCGCCAGG GCCAGCACAA      300

```

CCAGAGCCTC GAG

313

(2) INFORMATION FOR SEQ ID NO:1345:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

GAATTCGGCC TTCATGGCCT AGGCTTCTCT TCTGAATTGA TTGGTAGTGT TGTTATTTTC	60
TTGTTATTCA GTTTAACAAG TACATAATCA ACATCAGTGC TTGGGAAGTC AGGAGTACGA	120
GAGATAAATA AGAAGTATAT GATCTTTTCT CTTATTTTCT CTCAGTATAA GTTGGACCTG	180
TTTTTCCCTT CATCTCTTTT TCTTCAAGAA CATAATATCG GCTGAAGTGG AATGAGTATT	240
CAAATTGTCC AAAAAAATAT ACAAGTGAGG GAATTAATAA AATTTTGTGT AATTATAAAT	300
ATGTATATAT TGGGGGCGAG TCTCGAG	327

(2) INFORMATION FOR SEQ ID NO:1346:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 189 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

GAATTCGGCC TCATGGCCTA AATCCTTGA AATACAATGA GACTCATCAG AAACATTTAC	60
ATATTTTGTA GTATAGTTAT GACAGCAGAG GGTGATGCTC CAGAGCTGCC AGAAGAAAGG	120
GAAGTATGTA CCAACTGCTC CAACATGTCT CTAAGAAAGG TTCCCGCAGA CTTGACCCCA	180
ACACTCGAG	189

(2) INFORMATION FOR SEQ ID NO:1347:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

GAATTCGGCC TTCATGGCCT AGTGGGCTTC AGGAAAGCAA AATATAAATA TTATGGTTAA	60
AGAAATTTATA ATTAAGATT CACCCATAAT TCTTAATACT GTGTTGACAA TCATGGCTGC	120
ATTGTCTCCA AAAACAAAAG AAGATGGATC CAAAGATACG TCTAAGGAAA TGGAAAATCT	180
TTGGGGTATC AAATCGATTA ATGATTATAA CACTTGTTT CTTGGTGTG ACACGGCAAC	240
AGAAATAACG GAAAAGCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1348:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

GAATTCGGCC TTCATGGCCT AGTAATGTTA AAACAAACGA AATAAAAATA GAAGGAAAAA	60
CTTTCTGAGT TTCAAAAACA ACAGACTAGT ACTCTAAAGA ACTCTTTAAA ACAATTAAC	120
GTTAGGATTG CAGTTATGAT TGGATATTAT TTAATTCGTG TTCTGATGTG GGGTTCCTCC	180
ACTGTGTTCT GTGTGCTATT AATATTTACC ATTGCAGAAG CTTCAATCAG TGTTGAAAAT	240
GAATGCCTTAG TGGATCTGTG CCTCTTATGC ATATGTTACA AATTATCTGG AGTTCCTAAT	300
CAATGCAGAG TTCCCTCCC CTCCGCGCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 553 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

GAATTCGGCC TTCATGGCCT AGGAAGACAG ATTCACAGA GAGTGGGTTT CATGTAAAT	60
GTCTGATTTC CTTGTGGAT GCCCCACAA GGACACTAGG TTTTGTGGGC CAATGTGTTA	120
TGTGTGTATG TAGGCAAGCA GGAGGGGGTG GGTGGGCTTC TTTTTTTTC TATTTTTTC	180
TTTTCTTTT TGGTTGTGGA AGAACCACGT TAACCCCTCT AATTTCTTTA AAAAGACATA	240
AGGTTTGAAA AGGAGATTT AGGAAGAAGC AAAAGAAAAA AAATGGGATA CATATATTGC	300
ATCTGTAATC CAATCAAGCT GTCAGTGAAG ACAAACCTGA TCTCTGTTCT CACCAGTTGA	360
CACACTCATC AGGCTATAGG TCAACTCTAA GTGTGGTGAC AGGTGATGGA CTCTATGCCA	420
ATTCTGATAC TGAATTTTCT TTTGCTTATT GAAGCTTCAT TTTGTGTGTT TTAATTATGA	480
AAGTATAGTA ACACCTACCA TGCATACCAA AGCAATATCA ATATTTTCAA ATGCATCTTC	540
CCCCATTCTC GAG	553

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 246 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

GAATTCGGCC TTCATGGCCT AGGTTTTTGT TGTGTTTTT TAAAGGAGTT AGACATAGCC	60
TAACAAACTG GAAATTGACA TTTCCATCTA TTTTCTCCC TTTTGAAGCT AAATATGTCT	120
TTGTTATTTT GGTTCCTAGT CCCCATTACT ACTTATTTTC TGATAGTTCA TCCACAGCAA	180
CTTCAGTCAG TTAGCTCACT AGTCTTATG GCTAGAGATT CCGCCAGTTT TCCCCTAAAA	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:1351:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

```

AAAGAAAAA TAAAAA AAAAAGGTGTA TGTCAGACAC ACAAGAAAAG      60
CAATCAGTG TTGTAAGCTT AAAGTACAAT TTCAAAGGTC ATTACCAACA GCAGGGTTTT      120
TTTATACCT TAAAAACATT ATGCTACATA TCATTGCCAT TTTTCATATT TGGGGTTTTG      180
CTACTCTTAT ACAATGGAAT CAATGGAAAT GTCATCCAGC CAGATCTCGA G      231

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(2) INFORMATION FOR SEQ ID NO:1352:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 260 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

```

TGAATTCTAG ACCTGCCTCG AGTTGCTCCC AGGAATAGTC CAAAGGAGCT GCTCTGCCC      60
CTTTATACAC AAGCGCCAGC AACCAAAACC CTCCCTCTG GCAATAAGGC CTCACTATAG      120
TTGCCCTCAT GCTTCCTAAG CTCTCTCTTG CTCTAATAAC TCTAATTCTG GGCCAAGCCC      180
AAGAGTGCCA TTCTTTCTTC CTAGCTGGGG ATGGAAAGCT GAGAGGGGCA CAAGGAGGGC      240
AAAAGTATCA CCCTATCGAG                                260

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(2) INFORMATION FOR SEQ ID NO:1353:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

```

GAATTCGCCT TCATGGCCTA CTTTCAAGT GAATGATTTG GTGTTTGAAC CTTCTTGATT      60
ACCTTAAGAG GGAAAAATGA AGGAGAGGAG GGAACCATCA TCACATACCT TTACAGTTGT      120
GGAATGTTAG CCCACTATAG TGTTTAACTA AGGAAAATCT AATATAATAC ACTCCCAAGT      180
GATCTGAAAT GATCGCTAT TCAGAATTCC AGAGAAAGAC ATATCCCTGC CAGAAGGGTG      240
TCCTTCATAA CCAAATTGG TCTTCAGTCT GGTGCGTGCA TACTCAAACA GGAATCACTT      300
CCCTTAAGGA ACCTAAGGTA TGCAGTTGAG ATCAACTTAT TCCTTTTGA TTTGTCCCCT      360
TAAAGCATCA ATCAGACGTG AATGCATCTT GTGACTTGA GTTACTAGTA ATATTGAAAT      420
CTGAAACTTG GGGGATCTTT GAAGACACAT GGGATTAAAA GCTGCATAAT ATACATCTCG      480
AG

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(2) INFORMATION FOR SEQ ID NO:1354:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 339 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

GAATTCGGCC TTCATGGCCT AATACCCAAA ATTGGCATGA CTAATTATAA AATAGTGCCT	60
CCCAAATCCT TGGAAATATC GAAAGACTGG CAATCAGAAA CCATAGAGTA TAAAGATGAT	120
CAGGACATGC ATGCTTTAGG GAAAAAGCAC ACTCATGAGA ATGTGAAAGA AACTGCCATC	180
CAACAGAAG ATTCTGCTAT TTCTGAAAGC CCAGAAGAGC CACTGCCAAA CCTTAAACCG	240
AAGCCTAACC TGAGAACAGA GCATCAAGTG CCCAGTTCTG TGAGCTCACC TGATGATGCC	300
ATGGTTAGTC CTCTGAAACC TGCTCCCAA AATCTCGAG	339

(2) INFORMATION FOR SEQ ID NO:1355:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 203 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

GAATTCGGCC TTCATGGCCT ACTTTTAGAT GCTTTACATG CATAAATCA AATAATACAT	60
TAATAACCTT CCATACATCT TTCTTTGTGT ACACGTTACT ATTTCTGTAA GATAGATTTT	120
TAAAAGTGA ATTTCTAGGC CAAATGATTT AACTTTTTTT TGTGTTGTTG TTTTTTGTG	180
TTTTTGAGAC GGAGTGTCTC GAG	203

(2) INFORMATION FOR SEQ ID NO:1356:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 516 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

GAATTCGGCC TTCATGGCCT AGGAGAATCA GGCAGGGAGG TTGCAGTGAG CCGAGATGGC	60
AGCAGTACAG TCTAGCTTCG GCTCGGCATC AGAGGGAGAC CGTGGAAGA GAGGGAGAGG	120
GAGACCGTGG GGAGAAGGAG AANGAGGGGG AGGGGAGGG GGGGAGAGG AGAGGGACAA	180
TGATGTCTTG CTGTAGGTAT TCTTCCCAT TTGAATTTT TCCTCAGCAT TATTTTTTTT	240
AACATCATT AGTCTCCTCT TATACTACAC TTGGATTGAA TTTAATATCT CATGAAGAAA	300
AAACATTTCT ACTTTGAAGC ATGTGAATTA GCATGTTTT ATAACAGCTT TATTGAGATA	360
TAATTTACAT ATATAAATA ACCGTTTAAA GTGTATAAAT CAGTGGTTTT TAATGAGATA	420
TAATTTACAT ATATAAATA ACCGTTTAAA GTGTATAAAT CAGTGGTTTT TAAATATTC	480
ACAATGTTGT ACGACCGTCT TCTCAGTCAA CTCGAG	516

(2) INFORMATION FOR SEQ ID NO:1357:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

GAATTACTAA	TCAAGAAAAA	ACAAAATCAC	AAATCACTAC	CAAAGCAGTT	CATTGTCAAT	60
AATTTTTC	CCTTGTATTT	TTGTTTACTT	TTTGCGAACC	CTGAGCATAC	ATCCAAGTTG	120
CCCTAAATAT	ACGCACACCT	GAGGTGTCT	TTATAGGAGC	TTTATGGTTG	CAAGTTTGT	180
GTATAATCTT	TAATCATTTT	GAGTTGATTA	TTGTGTATCT	AGTACCATAA	GAGTCCTGTA	240
TTATTCTTTT	GCATATGGAT	ATCTAGTTTT	GGAAATCTTC	CCCGTTGTGT	CATTTTGGTG	300
GTGTTTGA	AAATGTGTTT	ATTCCATATA	AATTTTGT	TATTATCGAG	CACATTCATT	360
TTGCTCACTG	GTCTGTGTTT	CTCTGTGTAC	GCCAGTAACC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:1358:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 328 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

CTCGAGTCTG	GCTTTGTTTC	AAAATGATTA	AGATTAAATG	ATGAAATAAT	ATTTTATAGC	60
CACTGCATTG	GATACTTGGG	TTGTTTTTCA	AGCATCTTCT	TATGACTAAA	TCTTCTGTTT	120
CATTCTGTTT	TAAATCTAAA	AAGTAAATG	ATGGTCACTT	GGAATCTGCT	CTATATTTTA	180
ATTATAGTCT	CTTCTGTTTA	TAAACAATAA	CTTACACATA	TTTTTCATAG	TTTAAAGTAA	240
AGATTAAATA	ATGCCATCTT	AGAAAGGATC	TGTTTAACTT	ATATTATAAA	AGTTAGATAC	300
ACAATTTTAG	GCCATGAAGG	CCGAATTC				328

(2) INFORMATION FOR SEQ ID NO:1359:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

CTCGATGGCC	TAAGGCAGTC	TCCTGGAAGC	ATGACATTGA	TGCCCTGGGC	TCACCTCTTT	60
GTTTTGTTT	CCTTCACTT	TAGCGGGAAC	CACATCTTCA	AGGGCCGTGC	TGCCGGCATA	120
GCAGTGAATG	AGAACGGCAA	AGGCCTCATC	ACAGGTACGG	ATGGGAACTG	CCTGGCACCT	180
GGCAGCCAGG	CCAAGGTCCC	CTGGCGTCAC	CCCCCAGCTT	CAGGACCTCT	AGGCCATGAA	240
GGCCGAATTC						250

(2) INFORMATION FOR SEQ ID NO:1360:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 206 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

GAATTCGGCC	TTCATGGCCT	ACGATTCTAT	TTCCTTATCT	GCTTGCAGAG	CTATTTAAGA	60
ATCAATGTCT	TATTTTTCCT	GAGTCCTTTA	TAACCCTATT	CATATTTTCA	ATTGCTGATG	120
CCTCTTTGAG	CTACGAGTTC	TACTTTGTGC	ATAACGTTGA	GGAATTTCTA	CGTTTACTGT	180
TTCTCCTTAC	TTCACATCATC	CTCGAG				206

(2) INFORMATION FOR SEQ ID NO:1361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

GAATTCGGCC	TTCATGGCCT	AAGAAATCAA	CGTTGAACCC	TAATGCTAAG	GAGTTCAATC	60
CTACAAAGCC	TCTGCTGTCT	GTGGTGAGCT	GGGACAGGAG	AATGTGGACT	TTGGTTTCTG	120
TGGGGAGACT	TGGGCAGTGC	TTATAGATGA	ATAGGGGGAG	GAACACTTCA	CTTCCAGGAC	180
CACTTGCCCTG	GCAGGCAGTG	TGAGGAGATG	TCATAAAAAT	GTAAGGATGG	CACCTTTGGG	240
GCTGGCTTGG	GGAAAATGGA	CTCAGGTCTC	TAGGTTTGGG	TGATCAGGGA	TCCCAGTGAG	300
TCTGATGAGG	GGTTAACAGG	CTTTTCTTTG	GTTCTTGCCA	TTTGGCTGAG	GGAGTATTGG	360
AGTGGGGATA	GCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:1362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

GAATTCGGCC	TTCATGGCCT	AGTTAAAGGC	AAGTATGTCA	TATTACTGAG	GCTACAAGTT	60
AGTCAGCAGA	TGAGTGCCAG	TCCAGCCTTT	TCTGGTATGT	TATTGTTAGA	AATATTGAGT	120
TCTAATGTTA	CATCTGAGGA	AGTATGTAAT	TTGAGAATTG	TAACCTCTAA	GGGATTCACT	180
GCATCATAGC	TATGCCTGTA	TGGAGTCTAA	CATATGACCA	ATACCAACCC	ATAATCCAGC	240
ATTGAATTCT	AGACCTGCCT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

GAATTCGGCC	TTCATGGCCT	ACCCCTCCCC	TAGTTCAGT	CCAGGTAAAC	AAAAATTGAT	60
TCTATTTTTT	CAAAACACCA	GCCCCCTCAG	ATGGCCTGGT	TAATCTTCAT	TAACATGTTA	120
TCTTCATTAA	CATGTTTATC	TTCATTAACA	TATTTCTCAG	TGATAAGAAG	GGCCCAGGGT	180
TCAACATCCC	ACTTTGCATC	CATGCAGACA	AGGGCTGTGG	GAAGCTGTAA	AACTGAAGAG	240
GCGGTGAATC	CAGGAGGGAT	TCCCCAGATA	TCCGTGAGTT	GGTGTTTGAC	TTTCTTGAAC	300
ACGTCTTTCC	TTTACTTTAC	ACTTCCACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

CTCGAGGGGT	CATGTTGTTG	GGGAGAAAGA	GACCACATCA	CACACAGAGA	GAACAAGTCT	60
GTATTAGTTG	CTTTTGCTAC	ATAACAAACC	ACTCCAAAAT	TTAGTGGTTT	AGAACAATCA	120
CCTATTTAGT	TAATGATTCT	CTGGGTTGCA	ACTTGGTCTG	GGATCAGCTG	GGCAGTTCTT	180
TTGCTGGTCT	CAGCTGGGTT	CAGCTGCCTA	TCAGCTAGGG	AGCTCTGTTT	CAGAGGTTGG	240
TTGGCTATGG	GTGGCAGGGA	TCAAGGATGA	CGGAGCCATG	TGTCTCTTTT	CCCTTTATTA	300
CCCAGCAGGT	TAGCCCAGAT	CTTTTCCTTT	TCTTCTCTAG	GCCATGAAGG	CCGAATTC	358

(2) INFORMATION FOR SEQ ID NO:1365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

GAATTCGGCC	TTCATGGCCT	ACTTGTTTCAG	GGTATGGGGC	TAGGATGAGA	GAGAATNCCA	60
CAGAGTATGA	AGGAAGAGTG	ATAGATCCAG	ATGAGATACA	GCTCAGAGTG	CCACGCCCCC	120
AGAAAGAGGA	ATCAGGCAAG	TACTGTCCCA	AGGCAGCTGG	AGGGTGAGGG	CTGAGTGCCC	180
TGGCTTCCTC	ACTTGGGGAG	ACCATGGGTC	TCTGTAGAAA	TTCCAATATA	AAGGCAGGGA	240
AATTTGACTG	CATGGAGTCT	TCAGGTAGAA	ATGTTTCTCT	TGCCTAAATT	CA	292

(2) INFORMATION FOR SEQ ID NO:1366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

GAATTGAGCA	AGATACCTGG	GTCAATGATCT	CTGAACAGGG	TGAGAACTT	TATAAAATGA	60
TGTGCAGACA	AGGAAATCTG	ATCAAAGACA	GAAAAAGAAA	ACTGACTACG	TTCCCTAAAT	120
GCTTCTTGG	AAGCGAATTT	GTGTCATGGC	TGTTGGAAAT	TGGAGAGATT	CACAGGCCTG	180

AGGAAGGCGT GCACTTGGA CAAGCATTAT TAGAAAATGG AATCATTAC CATGTTACTG 240
 ATAAACATCA ATTCAAACCA GAACAGATGT TATATAGATT TCGCTATGAT GATGGAACAT 300
 TTTATCCAAG AAATGAGATG CAGGACGTT CCGAG 335

(2) INFORMATION FOR SEQ ID NO:1367:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

GAATTCGGCC TTCATGGCCT ACTTTCTCTG TTTGCCTTGA CCTTCTTTT TCATGTTAAA 60
 GCCTTTCTCTC AAATGTCTGA TTACCCTTGG CTGCCCGTCA TTTAAGAAAG CGCCACTAGT 120
 CAGCTCATCG GAAGCTGTGA GGGAGAGGGC TGCATTGGT CCTGCCAGGT GGAGGAACAC 180
 TCAGGCATCA GTACTAGGAG GTCTTCTCTC TCAGCCCATT GGATTTCCT AGAGTCCTAC 240
 ACGGCTGGGA TGAGGCACCT GGGTGCTGAG TAGAGGAAGG GAGTCATGGG TCAGTCACCC 300
 TGTATGAGA TTTTACACA ACCCCTCTC TCCAGGACAC GCCTCGCCCC CCACCCTAAG 360
 TAATGCAGAA CCCAAATCTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1368:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 347 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

GAATTCCTAT GTGACTGCGA TGGATCTCTT TGTTTCTGTT TGTTCATTT TTGTTTTTGC 60
 AGCCTTGATG GAATATGGAA CCTTGCATTA TTTTACCAGC AACCAAAAAG GAAAGACTGC 120
 TACTAAGAC AGAAAGCTAA AAAATAAAGC CTCGATGACT CCTGGTCTCC ATCCTGGATC 180
 CACTCTGATT CCAATGAATA ATATTCTGT GCCGCAAGAA GATGATTATG GGTATCAGTG 240
 TTTGGAGGGC AAAGATGTG CCAGCTTCTT CTGTGCTTT GAAGACTGCA GAACAGGATC 300
 TTGGAGGGAA GGAAGGATAC ACATACGCAT TGCCAAACTG ACTCGAG 347

(2) INFORMATION FOR SEQ ID NO:1369:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

GAATTCGGCC TTCATGGCCT ACCATTTCT ATGAGCAGAG GAGAGTCACA GGGCATCATG 60
 TGTTAGGAGA AAGAGGCTGG ACTTTATCTT GTCAGTAATG CTGGATGATA CAATAAGGGT 120
 AGGGCCTCAA AAAGTAAATG TAAAAATGAT ATTTGGCACA CATTTGGGTG AATAGAGGCT 180
 GGAGAAAGGG AACCAAGTCA CTATGTATTG GAATAATTCA AGTATAGGCC TGGGATACTC 240

GAG

243

(2) INFORMATION FOR SEQ ID NO:1370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

```

GAATTCGGCC TTCATGGCCT AGAGGATTAC TTATTTCTCA GCATTCATCT GGTAACCTAA      60
GCAGCATGAA GCAAGAGTTG CACTTTAAAA AATGACAAGA AAATAGCTAT TCATTTAGTC      120
GACAGAGTAA GGCCCATCTC ATTTCCAGGA TCACTAGTTT CTGCTTATGA CGGGGTGAGC      180
ATCCGCCAGC GCGGTGATTG GGAGGCGCCC CTGTGTCTTT AGGCTGAGGC AGTGCCCATATA    240
GCTGCAGTGC CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:1371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

```

GAATTCGGCC TTCATGGCCT AGTGTAGCAA GCTTCCCCTT TGGGAGGGAT GTGAGAACAG      60
AAGACTGAGG ATTGTCTCTA ACTCTAGGAT TCTTTGATGA TTGATTGGAT TGGGGTTTTG      120
TGTGTGTCT AATATTACGG ATGCTAAAAT GCCTGTACTT CCAAGGTGAT AGCCACCAAT      180
AACCATACAC GTACTAGTCA TCCTAGAAGT GTTTTATTT CTCTGTGG TTATCTTCCC      240
TACCCCTAGG GTTGGTGTCT GTTTCCTGCT ACTTCAGGTT GGTTCCTCAC TGGGAGGCTT      300
CTGCTGACAG AAAGCCCCAT GCTTGTCTCG AG                                     332

```

(2) INFORMATION FOR SEQ ID NO:1372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

```

CTCGAGGGCA ACTGCAGAAG AAAAGATCAG TGAATCTGAT GACATAGCAG AAGAACTAT      60
CTAAAGCGAA GAAGACAGGA AAAAAAGCCC CAATGTGAAA TGAACAGATC ACCAGTGAGC      120
TGTGGAACAA CCTATATGGG TTATAGGAGA CCCTAAATGA GAGAACAAGG GACTAAAAGA      180
AGGATTTAAA GAAATAATAG TACAATTTTC TCCAAGTTTC ATGAAAACCG ATTGAATTCT      240
AGACCTGCCT CGAGGCAGGT CTAGAATTCA ATCGC                                     275

```

(2) INFORMATION FOR SEQ ID NO:1373:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

```
GAATTCGGCC TCCATGGCCT ACAAGACCAT CCTGGCCAAC ATGGTGAAAC CCTGTCTCTA.   60
CTAAAAAATA CAAAAAATT AGCCAGGCAT GGCAGCGTGT GCCTGTAGTC CCAGCTACTC   120
AGAAGGCTGA GGCAGGAGAC TTGCTTGAAC CCAGGAGGCA GAGGCTGCAG TGAGCCGAGA   180
TCGCGCCATT GCACTCCAGC CCGGGCGACT GAAGAGACTC CATCTCAAAA AAAAAAAAAA   240
AAAAAGATGA GCCTTTTCTG GGAAAGTGA AAAGACAGAG AAGCCTCCTG ACAGCCAAGG   300
AGACCAGCAG CCAAGTAGAG AGGTGTTGTA ACAAGGCCGA GGCCCTCGAG               350
```

(2) INFORMATION FOR SEQ ID NO:1374:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

```
GGAAAAATCA AGGAGACATA TTACCACCAA AAGAACAATA ATTCCTAGA AGCTGCAAAT   60
AAATAGAGAC TATACACTGC CTTACAGATA ATTTAAAGTA ATTGTTTAA GGAATCTCAG   120
TGAAC TTCAA GAAAATACAG AGAATCAGTT CTATGAAATC AGGGAAACAA TAAATCAACA   180
AAACGATAAA TTAAACAGGT TGAAATCACT AAAAGAACCA AACAAATTTT GGGGCTAAAG   240
AATACAATGA ATGAAATGAA AAATACTCTC GAG                               273
```

(2) INFORMATION FOR SEQ ID NO:1375:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 332 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

```
TGTGGACTAA AAAAGATGCT GGGAAAAAAG TTGTTCCATG TAGACATGAC TGGCATCAGA   60
CTGGAGGTGA AGTTACCATT TCAGTATATG CTA AAAACTC ACTTCCAGAA CTTAGCCGAG   120
TAGAAGCAAA TAGCATTG TTAAATGTGC ATATTGTATT TGAAGGAGAG AAGGAATTTG   180
ATCAAAATGT GAAATTATGG GGTGTGATTG ATGTAAAGCG AAGTTATGTA ACTATGACTG   240
CAACAAAGAT TGAAATCACT ATGAGAAAAG CTGAACCGAT GCAGTGGGCA AGCCTTGAAG   300
TGCTGCAGC TAAAAAGCAG GAAAACTCG AG                               332
```

(2) INFORMATION FOR SEQ ID NO:1376:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

GAATTCGGCC	TTCATGGCCT	AGGCTTCAGC	AGCTTCCTAC	GATCAGCCGA	AGAAAGCAGA	60
AGCTCTGGAG	GCTGCCATCG	AGAACCTCAA	TGAAGCCAAG	AACTATTTTG	CAAAGTTTGA	120
CTGCAAAGAG	CGCATCAGGG	ACGTCGTTTA	CTTCCAGGCC	AGACTCTACC	ATACCCTGGG	180
GAAGACCCAG	GAGAGGAACC	GGTGTGCGAT	GCTCTTCCGG	CAGCTGCATC	AGGAGCTGCC	240
CTCTCATGGG	GTACCCTTGA	TAAACCATCT	CTAGAGAGGA	CATCCCTGCT	GGGCTGCTGT	300
GCAGAGTATA	AGATTTTGA	CTTGTTTCATG	TCCCCTCTCA	CCCCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:1377:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 437 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

GAATTCGGCC	TTCATGGCCT	AAATATGTTG	AAATAGGTTA	GAAAAGGAGG	TGAATATTAT	60
GGGCTGTTGT	CATTTGTAAA	TTCTGCAGTA	ACTTCAGCGT	TGAGGGTTTT	TTTTGTTTTT	120
GTTTTTGT	TTAGTTTTGC	TTACTGAAAT	CAAAGAGTTG	TTACTCTGTC	TGTGGGTGTT	180
TAAGAGACAG	GATCTCACTC	TGCTGCCAG	GCTGGAGTGC	AGTGCAGCCA	CGAATGCCTG	240
GGCTCCAGGC	CCTCCTGAGT	AGCTAGGACT	TACAGGCATG	CACCACCACA	CCGATTTTTT	300
TATTTTTTTA	TTTTTATTTT	TTTTAGTTTT	TAGAGGTGGT	GGGGGGGTCT	CACTGTGTCT	360
GCTTCTGGGC	TCAAATGATC	CTCCTGCCTC	AACCTCCCAA	AGTTCTAGAA	TTACAGAGGT	420
GAGTACCAC	ACTCGAG					437

(2) INFORMATION FOR SEQ ID NO:1378:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 267 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

GAATTAAAGC	ACTGCCTCTA	TTCAGGCTGC	CGAGGCACTG	CTTTAATTTT	TTGAAAGATT	60
CACCGCGTCT	TCTTGATTTT	CAAGAAAAAT	CCCGTTAAGA	ATTGAGGGGC	TCTCTTCTTC	120
CCCTCCTGAC	GTGAGTGTA	CTCACTTCCT	GGTATGTCTC	CTTTCCTTTT	GGCCTACATC	180
CTTTGTCTGT	TAGGTGCTTC	CACATCCTTA	TGCTTTAAAT	GGCCAAAATA	CGTCACCCCC	240
ACTGCCAAAA	CAACAGATC	ACTCGAG				267

(2) INFORMATION FOR SEQ ID NO:1379:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 305 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

GAATTCGGCC TTCATGGCCT AGAGGTGACT AGAAGCGAAG ATGGAGGTGG CGCAGCACCT	60
CATCCCAACT CATGCCACCT GGGGAAGCAG CTTCAGGCCT TTCTGTTGTA ACCTCAGCAG	120
AAACTTTGGG GTTTATCCTT TATCTTGAC ATGCCCCAGG GAGGTAAAGG GACTTGCCTA	180
GGTTCATGTA CAAACTTTCT GCTTCCAGAG CAGGACTTTA TTGGGACACC ATAAGGTTGA	240
GGCTGGGAGG TACCCAAGAA TTCCTGGGGA TGGTATGTCA TTGACTGTGG GTAGAGGGGC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTCGGCC TTCATGGCCT AGGCTTGGTT GCCTCTGAAA GGAGGGAAAG TCTCTTGGTA	60
AATTATCTCT TTTGTGCTGT TTGCTGTTTCT TCTGCTACCG TCTTTGCAGT TCTCTCTCA	120
CTGGTTGCAG GCTTTTCATAG TAAGGTTTGG CGAGAAATGT TCCAAACATC ACATTTTGA	180
TTCTAGGCTG TCACCCAGG CTCGAG	206

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTCGGCC TTCATGGCCT ACTCCTCGAT GCTGATTCAT ATCCTACTGC CCATGGTTTT	60
CTGCGTCTTG CTCATCATGG TCATGTGCTA CTTGAAAAGT CAGTGGATCA AGGAGACCTG	120
TTATCCTGAC ATCCCTGACC CTTACAAGAG CAGCATCCTG TCATTAATAA AATTCAAGGA	180
GAACCCCTCAC CTAATAATAA TGAATGTCAG TGAAGTATC CCAGATGCTA TTGAAGTTGT	240
AAGCAAGCCA GAAGGGACAA AGATACAGTT CCTAGGCACT AGGAAGTCAC TCACAGAAAC	300
CGAGTTGACT AAGCCTAACT ACCTTTATCT CCTTCCAACA GAAAAGAATC ACTCTGGCCC	360
TGGCCCCTGC ATCTGTTTGG AGAACTTGAC CTATAACCAG GCAGCTTCTG ACTCTGGCTC	420
TTGTGGCCAT GTTCCAGTAT CCCCAAAAGC CCCAAGTATG CTGGGACTAA TGACCTCACC	480
TGAAAATGTA CTCGAG	496

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAACTAGAC AAGAAATCTC AAGCCATGGA GGAGCTAAAA GCAGAGCGAG AAAAACGAAA	60
GAACAGAACA GCTGAGCTCC TTGCCAAAAA ACAGCCATTA AAAACCAGTG AGGTCTACTC	120
TGATGATGAA GAGGAGGAAG AGGATGACAA ATCCAGTGAA AAGTCAGACC GTCATCACG	180
AACATCATCG TCTGATGAAG AAGAGGAGAA AGAAGAGATC CCTCCCAAAT CCCAACCAGT	240
TTCCTTACCT GAAGAATTGA ATCGGGTTCG ATCTCTCGAG	280

(2) INFORMATION FOR SEQ ID NO:1383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTCTAGA CTGCCTCAG TCTCCCCGTC ATGCTCCCTC TGCCCCGCCC TCAAAAAAAA	60
AAAAA AAAAACA ACAGCACCTG TCCAGGCTTC CTTAGGTACA TCTTCTTTGT	120
ATCCATTGGG AGGCTCTGAG ACTGGCCCCA CTGGTCCTA AGAATCCCAA GGTCTTTGGG	180
AGCGTCCAGC ATGTTAATTA GCGTATCATT ACATACTGCT ATCCCTTTCC ATTTCTTTTT	240
GTTCCATCAC TCTCCTCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTCGGCC TTCATGGCCT ACAGATTATC TTACACTGAA CTGATCAAGT ACTTTGAAAA	60
TGACTTCGAA ATTTATCTTG GTGTCCTTCA TACTTGCTGC ACTGAGTCTT TCAACCACCT	120
TTTCTCTCCA ACCAGACCAG CAAAAGGTTT TACTAGTTTC TTTTGATGGA TTCCGTTGGG	180
ATTACTTATA TAAAGTTCCA ACGCCCCATT TTCATTATAT TATGAAATAT GGTGTTACAG	240
TGAAGCAAGT TACTAATGTT TTTATTACAA AAACCTACCC TAACCATAT ACTTTGGTAA	300
CTGGCCTCTT TGCAGAGAAT CATGGGATTG TTGCAAATGA TATGTTTGAT CCTATTGCGA	360
ACAAATCTTT CTCCTTGAT CACATGAATA TTTATGATTC CAAGTTTGGG GAAGAAGCGA	420
CACCAATATG GATCACAAC CAGATGGCAG GACTCGAG	458

(2) INFORMATION FOR SEQ ID NO:1385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

```

GAATTCGGCC TTCATGGCCT AAGTTTTCAT AATCTTTCTA AGCAAATAAA TTGAGCATGC      60
AGGTTTTTTT TGCTTTCAGT AAGTATGTTA AAGATATTTA TTGTACTTTG GTTTTCTTTT      120
CTTTTTTTTT TTTTTTTTTT TTTGAGACTG AGTCTCTGTC ACCCAGGGTG GAGGGCAGTG      180
GCCCAACCTC AGCTCACTGC AACCTCCGCC TCCCATGTTC CAGTGATTCT CCTGCCTCAG      240
TCTCCCGAGT AGCTGGGATT ACAGGTGTGA GCCACCACGC CCAG                          284

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(2) INFORMATION FOR SEQ ID NO:1386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

```

GAATTCGGCC TTCATGGCCT AGTAGTTGTT CCATGCTGTT GTTTTTTGTT TTATCTTTCA      60
TTGCCTTTCC CTCTGCAGTC AACATTATGA CCTGGGGACT CCAGCATCCT TCAAGCAAGC      120
CATTTCCGAA GAAGGTGAAA AGAAGCCAGG ATGATTGGCA CCTCCTCCTC CTCCTCCTCT      180
TCTTCCTCTT CCCTTGCCCA GCCCCCTCCT GTGCGTGTGT TTCAGACAAC ACAGGAGCCA      240
GCACAGGAGT GGAAAATCCT GTAGCGCAAC TCGAG                          275

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(2) INFORMATION FOR SEQ ID NO:1387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

```

GAATTCGGCT TCATGGCCTA ATTGAATTCT AGACCTGCCT CGAGCCTCCA AAAAGAGTAA      60
ATAAATAAAA ATAAAATTGC CTTTAAACAG AACACACAT AAAACAAAGT TATATATTGA      120
ACCTAACCCCT GTATTTCCTC TGGGAACAGT GGTTCAAGTAT TCAATAATTC AGGATTTGCA      180
GCAGCATAGA ACTTAATGTA ATGAGAGTCA AGTATATATT TCCCAGAACC CTAAACTAC      240
TGCATATGTG AACATATCTT ATTCATTGAT TATGTGGGCA TATAGTGAAA CTCGAG      296

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(2) INFORMATION FOR SEQ ID NO:1388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

```

GAATTCGGCC TTCATGGCCT ACAACTTGTT CTAGCTTGTT ATCCCTCAAA GTTGGGTCAT      60
ACGTTAGTGC TAGATACTAG AAATTTTCAC TTTTCCACTG ATCAGAGAGA CAGACATTAA      120

```

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AAACAAAAAT AGAAGAAAGG AAAGCTTTCA CCCTGCAGCT TCTTAGCAGG GAACAATTGT 180
CTTGCCAAAA CTTTTTCCC TTTTCTCTCC CATTTCCTTT TACCCAATCC CTTCTTACTC 240
CTTGCCAGTG TGACCATGCG CATTGGTTTA AAAAGATATT CTTTCCTAAT CAGGGCAAGA 300
CAGGCAAGAA TTTTAAAAA GGAAGGGAGG GAGGGAAGAA GGAAGGAAA ATAAATCCTT 360
TATTTTTTTA AACCTATTTG AAACCTCTTA AGAAAATTCC ACAATAATCA GGATTCTCTG 420
AAATATTGTC AATATATATG AACATATTTG AAAAATACTA GTTACAGTAT ATTACATT 480
TTGGAACTT TTCTTCAGGG CCAAGTAACA TGTTGTATCT TCCTTTTTCG TTGTGGGGGC 540
TACTCGAG 548

```

(2) INFORMATION FOR SEQ ID NO:1389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

```

GAATTCGGCC TTCATGGCCT AATATGTTCT TCACAGGGAT GAGTCCTAAA TATTATCTT 60
CAGCCATGAC ATTTTCTTGG AATTCCAGAT TTGCATATCC AACTGCCAAC TTGATATCTC 120
ACTTGAAGA ACATCATCAC AAACCTAACT CATCTGAAGT TGGCTTCACA TTCTCCTCCC 180
CTATCACTAA CTGCCCTTCC CACAGTATTC CCCATTTCGG TACATGGTAC CACCATTAT 240
CCAGTTGTTT AGACCTAAAC CCTTCTAATT ATTCTTTTTC CTATCGTTAT CCCACATACC 300
TCGAG 305

```

(2) INFORMATION FOR SEQ ID NO:1390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

```

GAATTCGGCC TTCATGGCCT ACTGGGTTAT TATTCTATTC CGTTGATCTA GCTAGTTTTA 60
AATTTTCTAC CTTTCTACC TGTTTTGTT TAATAGTTTA CTGTTTTTAT CTGAACAAAA 120
TTCCTCTTTC AATAGTTGAT CCTGCTGAAT GTCTTCCCGT AGCATTGGGC TTCCTCAGGT 180
AACCTGGCAT TTGGTTTGA ATAGAAGGGT TTTTATGTC CTTTTTTTCT TTTTATTT 240
TGAGATATTT ATCTTTTCTT TATTTATTTA TTCGAGTCGG AGTCTACTCG AG 292

```

(2) INFORMATION FOR SEQ ID NO:1391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:

```

GAATTCGGCC TTCATGGCCT AGGCGATCGT ATTAATTCTC AAGAAATTC CAACAAATAC 60

```


CACCTGGTTA ATGTTTTCAT TAAGGGCACA CATTCTTGCT ATTGAGCCAA GTTGTGTTGGT 120
 GATGGTGATC AAAGTCGCTC TGGCCAGGTC CTCTTTACTG ACAGCCTCTC GCTTCTCCTT 180
 GCTCATCATG TTTCCAAAGC TTGAAGCCAC ACTCGAG 217

(2) INFORMATION FOR SEQ ID NO:1392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

CGGGAGGCTG AGGCAGGAGA ATCACTTGAA CCCGGGGGGT GGAGATTGCA GTGAGCCGAG 60
 ATCAAGACAT TGCATTCCAG CCTGGGCAAG AAGAGGGAAG TTCTGTCTCT AAGAAAAAAA 120
 AAAAAAAA AAAGCTACAC TTTGATCTTT GATTCACTAG ATATCAGTAA GTATTTGCTG 180
 CATTTCATGA GAGCCAACCA TGAGTAAGAC AGAAGTACTT CCTGTCCTCC TGGGCTTCC 240
 TGAGTAGCAG GAGAGATGGA CTAGGAAGAT GAGTGACTGC AGTAGCCTGT GCTGTTCTGC 300
 GGTGATGGGA GAGGCCACTG AGAGTCCGGA CAGGCAGGCT GATATTGTGA GAAGGCTTCT 360
 GGAAAGAAGG AACATTAAAG CTGAGAGTGA GAGTTGCGTA AGAATTTCCT AGGGAGGGGA 420
 AAGAGGGGAA CACTCGAG 438

(2) INFORMATION FOR SEQ ID NO:1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

GAATTCGGCC TTCATGGCCT AAAACTTCCT AGGAGAAGGC AAGAGAAAGC CACCAGACCA 60
 GAGCCGAGGA CTAACTTTA AGGTGAAGA CGGCAGAGGG GCAGGTTCTC CCCTGCACAC 120
 CCAAGGCCT CTCCTGCACC CGCGAGGCCT TCCTTGAGCG CCCAGGCCCC CGAAATGCCT 180
 GCCCTCCTTC TGACAAAAGG AGGGGGTAGG ATGTGAAGGG GTAGTGCAAC CAACAATGTT 240
 TTTGTAAACA CAACAACAAG GAAATACTCG AG 272

(2) INFORMATION FOR SEQ ID NO:1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

GTGAAATTGT CAAATAAAAA TATGAAACT CAGCTGACAA GAGTAAATGT CCTTAAAGAC 60
 AAAACAATTG AAGAGCTCAG GCAATCTTTA GCAAATGTTG AAAGGATGAA AGAGAAGGCA 120
 AATGTTGAAA CGATGAAAGA GAAGGCAGTT GTGAAAACAG AAAACTTGAA AACTACATTA 180
 GACTCTGCAG AGCAAAAGGC AAGATCAGAC AAAGAGAAGA CCCAGCAGAT GTTAGATGCT 240

GTCACCTTCTG AGCCCCCAAC AGCAAAGAGC GCACCTGAAG AAGTATCAGG ACAAGAACAA 300
GAAGTACTCG A 311

(2) INFORMATION FOR SEQ ID NO:1395:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

GAATTCGGCC TTCATGGCCT ACTGTGTGCT TAGTTTTAAA GACAACTTTG AAGTAAACAA 60
 TGAATAAAAA GATGTCACCT AAACCTCTGA GGCTCCTGAG CACATTTTGC TGATACAGTC 120
 TGTGGGGCTT GAGGAGACCG CATGTATTGT TCTTTCTTTT GTTTTCTTTC TGAGTTCTCA 180
 ACTGCGGAGA GCACCTGAAC CCCCTTTCCT TTTTGACCGC AGGCTGCACT TTGGGCCCCA 240
 GCCAGCCCTT TTTCTTTTTC TTTTCTTTT GTGGTCTTTC CCTGGAGCGA CTCTGGGGAG 300
 TCCTGGATAT CCCGCTGCC CCTTCCCCTC AGCCCCATGC TTGTTCCAAC AGTCTCCACA 360
 GCTCGAG 367

(2) INFORMATION FOR SEQ ID NO:1396:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

GAATTCGGCC TTCATGGCCT ACTTGGAAC GAAAGAGGGC CCAACCTACA ACTAAGAAGG 60
 GACAAACCTT GAACTAAGTA AGACCTTACA CACCAGAAA GAACACTGGG CCTCCTTCT 120
 TCAGGGACAA TGCAGTAGCC ACTTGGCTTG TGAATTTAC TGAAGGCTAT TTCTGTAAAC 180
 TTGCTAGTTA ACTTAGTTTT GTATTTCAGG CAGAGGTGCG CTCTGTAATG TTGGGCCTTT 240
 GACTTCACAG TACTGGAGAG CTGTTACAC AGATGTTTAG ACCTTCTCT CTCTCTCTCT 300
 TTTCTTCTT CTCAACAACT CTTATCTCTC GAG 333

(2) INFORMATION FOR SEQ ID NO:1397:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 356 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCGAGAT ACAGCAGCTG CTGCAGAACG 60
 TCAAGTCTGA GTTGGAGATG GCCCAGGAAG ACCTGTCCAT GACCCAGAAG GATAAATTTA 120
 TGCTCCAGGC AAAAGTGTCTG GAGCTGAAGA ACAACATGAA GACCTGCTC CAGCAGAACC 180
 AGCAGCTCAA GCTGGACCTA CGCCGCGGCG CGGCCAAGAC GAGAAAGGAG CCGAAAGGCG 240
 AGGCCAGCTC TTCCAACCCT GCCACGCCCA TCAAGATCCC GGAAGTCCCA GTTCCCGCCT 300

CGCTGCTGGA GGAGCTGCTG AGACCACCGC CCGCCGTGAG CAAGAGCCCC CTCGAG 356

(2) INFORMATION FOR SEQ ID NO:1398:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 447 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC	TTCATGGCCT	AATTCTATGA	GGTATTATTA	TCACTATTTT	ACAGATGAGT	60
AAACTAAGGC	TCACAGAGAT	TAAC TGGCAG	AACTGAAAT	CTCCATATCT	TTTGTATTCC	120
AGATTATTC	TCTTAATCAT	GATATGATT	TGTCTCATAT	AATCCAATAC	AATAAATAAG	180
GAGGTCAGGC	AGTAGGAGGT	GAAGTTGGAG	AGACTGGGAG	ACCTATCAGG	AGGGGTCATT	240
TATGCCTGGC	TAGGAGTTTG	GACTTTATGC	TGAGGCTATG	GGAGCACTAT	TAAAGTGATT	300
CTAGCACTGC	AAAGTTATGA	TTAGGTTTAT	CAGCCAAAGG	AAAAAAAAG	ATCTTGGTGG	360
TCACAGTGCA	GGTAGATACG	ACATAATCGA	GAAATGTGAA	GAATGCAGAA	TCAAGAGTTT	420
GGTGCTGGAC	AGAGAGAGGA	ACTCGAG				447

(2) INFORMATION FOR SEQ ID NO:1399:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 428 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACTCTTT	TAAATTTTCT	GCATTTGCCT	60
GAAAAGCACC	CCTGTAAGAA	TAGATTTCTC	ATGGCTCTAA	AAATTATTCC	CAAGAATACC	120
TTACTTGTTT	CAAAAGCAGA	CTGTTTCTCT	TCATTTTCATC	TCAAATCAGA	CTTCTGGGCA	180
AGATGTTCTT	TAGAGTAAGC	AAACCTACAA	CCTAAAAATC	TCTTCAAGAG	GCATCTCTGG	240
TCTTGTGACA	AGACCTCTTC	AAAAACCCAC	AGTAAACTC	CCCTCCCTCC	AGTTGGCCAC	300
CAGTCTGCCA	CCAAACATGA	ACAAATTCTG	CTGCTAATCG	GTTTCCCTTG	TGATCTGGTT	360
CCTGAGGTCT	TCGGATCTGT	GCAATGAATT	ATTTATTGTT	TTATTAAACC	GACAGTGGTG	420
TGCTCGAG						428

(2) INFORMATION FOR SEQ ID NO:1400:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC	TTCATGGCCT	ACTAGACCTG	CCTCAGGGTG	TTCTGTGGTT	TCAGGTGGAA	60
GGTGGAGGGC	CTCGGAGACC	AACTGTGAGT	TAGGCGGGGT	TTAGAATCTG	ATGGGAAGAG	120
GGCAGAGACA	ACAGGTTCTG	AAGAGTCAGG	GCTCCTGGGA	CCTGGGAAGT	AAAGAGTAAA	180

CCTGGGGCAG TGGGTCAGGC CAGTAGTTAC ACTCTTAGGT CACTGTAGTC TGTGTAACCT 240
TCACTGCATC CTGCCCCAT TCAGCCCGGC CTCGAG 276

(2) INFORMATION FOR SEQ ID NO:1401:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

GAATTCGGCC TTCATGGCCT AGCCACCGTG CCTGACCTAC TTATCTTTT TCCTGTTTCAG 60
CATCTAGTGT ATGATACGAT TTGCTTATTT GTTTATGTTT CATCATCTGT TCCCCACCCT 120
CAGCCCTGGC CCCCTTGCTG GAACGCAAGC TCCAGGCAAA GCTATTTTAC CGTTGCTGTT 180
TTCCAAGGGC CTCGAACAGT GCCCGGCACA TAGCAAATCC TCAGTGAACA TTAGAGGAAT 240
AAGTGATTCA AGAATAGAGC TGTTAGAAGG TGTCTGGAG GAAGACGCAT CCGGCTTCAT 300
CCCTGGCACC ATCGAG 316

(2) INFORMATION FOR SEQ ID NO:1402:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 342 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

GAATTCGGCC TTCATGGCCT AAATTCTCCA GCAAAATGAG GATGAAAACC AGGAAAGAAG 60
AAGAAATGGG ATCCATAAAA CAGTGGACCT TACTTAGGAT GTCTCATTCT AGAGTGACAG 120
CCAAAAGGGT ATCTCACCTT AGAGTGACAG CTATCCAGCA GACTAATTTT AGATGAGAGC 180
ATACTGTCTC GGGCTTTCTG GGAAGAATGT GCATTGAGT CCATAGATAG TATCACTGAA 240
GAGCTGGGAT GCTTGAGAAG ATTATTTAGT CAAGAAAAAA GAAAGACAAA TCAACAATAT 300
GTCAAAAAT TCAGGTCCAA TTATAGAGCA AAAGGGCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1403:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

GAATTCGGCC TTCATGGCCT AAGGCTAAAA AGAAGGAAAA AGAAAAGGAA AAAAAGGAGG 60
AGGAGAAAAT GGAAGTGGAT GAGGCAGAGA AAAAGGAGGA AAAAGAGAAG AAAAAGAAGC 120
CTGAGCCAAA CTTCCAGTTA TTGGATAACC CAGCCCGAGT TATGCCTGCC CAGCTTAAGG 180
TCCTAACCAT GCCGGAGACC TGTAGATACC AGCCTTTCAA ACCACTCTCT ATTGGAGGCA 240
TCATCATTCT GAAGGATACC AGTGAAGACA TTGAGGAGCT GGTGGAACCT GTGGCAGCAC 300
ATGGCCCAA AATCGAGGGG GAGGTAACCT GAG 333

(2) INFORMATION FOR SEQ ID NO:1404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

```

GGGCCCTGGG CCCAGCCCC CAGCCATCC GTGGCCAGG CACTGGGGG CTGAGGTCCT    60
CTGAGAAGGG ACACAGGGCC GGGGGCTCT CTCAGCCCAT CAGCAGGAGA GGACTGACTC    120
CAGAAAAATC AGCGTTTGTG CCCACTCAGG CTGCCAAGAC CTGTGTCCGT CCTTCCAAGC    180
TCAACCTTCA GAGTTCATGA GGGCCCTTGC CCAGAATGTC CACAGAGTTC ATGAGGCCCC    240
TTGCCCGGAA TGTCCACATT TGAAACCTCC CAACACCGAG CCCATTTCAGTATAACCA    300
GGAGGGAAAA TGGTGCTTGA AATAAGCATG CCACAAAGGA AAACCTGCTT TCTCGAAATG    360
GGCCCTGGCC GCCCAGGCC TGACCTCCCC GGCCAGGATG GAACGTTCCA GAAACCTCTG    420
AG

```

(2) INFORMATION FOR SEQ ID NO:1405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

```

GAATTCGGCC TTCATGGCCT ACTGGGTCC AACTGGATA TCTTGGTGA GAACATGGGG    60
AGGCTCAGCT TTGGGTCTAA CAGCAGTGAC TTCAAGGGCC TGTGAAGCC ACCAATTCCTG    120
GGGCAACAA TCCTTACCCA GTGGATGATG TTCCCTCTGA AAATGATAA CCTGTGAAG    180
TGGTGGTTTC CCCTCCAGTT GCCAAATGG CCATATCCTC AAGCTCCTTC TGGCCCCACA    240
TTCTACTCCA AAACATTTC AATTTTAGGC TCAGTTGGGG ACACATTCT ATATCTACCT    300
GATGGACACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:1406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGACTGCC CAAACCTGAC    60
CCATCCTCAG ACCCCACCC CCGTCACCGC TCCTCCCAAT GATTCCTCCC TCTGTGAGTC    120
CTGCTCTACT TTCCAATCC TCGCCTGCTC CAAACCTGAC CCATCCTCAG ACCCCACCC    180
CCGTACCGC TCCTCCCAAT GATTCTTCCT TCTTTGATCC TGCCAACTTT TCCCAACAG    240
CACCGTAATC CTCCCCAAA TCATCACAAT CCTCCACCAT ACAATCCCGC GTTCTCGAG    299

```

(2) INFORMATION FOR SEQ ID NO:1407:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 199 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

GAATTCTAGA CCTGCCTCTC GCTGGAAATC AGCGTTGTAA GATGGACGCC CTGCTCAGCA	60
GAGCTCATCT TTCTAGAAAG GCACCTGGCC TTGGAAGGCG AGTGAGGAAC TGTATAAGG	120
ACTTTTCTT CCCATGTTGC TTTTCAGGAA AGCTTTCAGG ATGTGGAAAT GATGGTTCAG	180
CTATTGGATG AGGCTCGAG	199

(2) INFORMATION FOR SEQ ID NO:1408:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 220 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

GAATTCGGCC TTCATGGCCT AGTGATCCAG AAGAATTACC ATTAACTTTA TTTCAGAATT	60
TAGACTTCCA AATCAGGTTA ATCCTCCAAT TAAAAGAAAG ATTTCAGAGTG AATTTTAA	120
AAGGCAAGGC AGTTATATGT TGCTTACAAG AACTAAACA TAAAGGCACA GATAAGTTGG	180
AAGTAAGAGG GAAAAGACA TGCGAATACT AAGTATAGAG	220

(2) INFORMATION FOR SEQ ID NO:1409:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

GAATTCGGCC TTCATGGCCT AGATAAGCCC TTCAGAAACA CATGCACTGT TAATTCTGTT	60
TTAAATATAA TAAAAACCAT TTCACCTTGA CATTACCTAT TAAGTTTAC TGAAAGTCAA	120
AAGGCCTACT TACTGTGACT TCCAAAAAG TATTTTGATA ATATTTTGAA AGAAATAAAT	180
AATTTCCCTT TGCAATGAAAT TAAAGCCAT GATAATAGGG AAAACATTAC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:1410:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 577 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

```

GAATTCGGCC TTCATGGCCT ACCCACGTAA CGGCTTGGCT GGGCACCCCC GCTTGGCTTG      60
GTGGTCCTGG TTTGGATTGG CTTTACCCTG GCATTCCCTT GCTGGGCTTG ACCTTTTCTT      120
GCTGGGCTTG GCATTCCCCT GGCTGGGCTG GGTGTTTCCC CGGTGGGGCG TGCACCTTCC      180
CTGGGTGGTG GAGGGGGCGT GGGCTCTCCC CGGGTGGTGG GGGGACGTGG GATCTCCCCA      240
GTTGGTGGTG GGGGAGGGGT CGTGGGCTCT CCCAGGGTGG GGTTTTGGCT GGGATTGACC      300
TTTCTCCCCT AACAGATTGG AAACCTGTAA TTTCCCGCTT TTTGGTGAAG CTCGTTGACA      360
GACACCATCT GCTCGTACT ACCAGGCTGT TGAAAGCAGA TGGTGGCTGA GGTTTCTCCA      420
AAGCTGGCTG CCTCCCCTAT GAAGAAGCCC TTTGGCTTCA GGGGCAAGAT GGGCAAGTGG      480
TGCTGCTGCT GCTTCCCCTG CTGCAGGGGA AGCGGCAAGA ACAACATGGG TGCTTGGAGA      540
GACCACGACG ACAGCGCCTT CACGGAGCCC ACTCGAG      577

```

(2) INFORMATION FOR SEQ ID NO:1411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

```

GAATTCGGCC TTCATGGCCT AGGGATGCCT CTCAGTGACC CTTATATGTC AGGTATGAGG      60
CGGATGGGGC ATCTCTCTAG TCCTTTCTAG GGTTTTACT CTTCTAGTCC CTTCAAGGGC      120
TGAGTGCTCT GACTTTATGT CTTCACCGT AGGCGTTGAC CCTGCACTAT CAGATCCTGT      180
GTTGGCCCGG CGCCTTCGGG AAAACCGGAG TTTGGCCATG AGTCGGCTGG ATGAGGTCAT      240
CTCCAAATAT GCAATGTTGC AAGACAACCC TCGAG      275

```

(2) INFORMATION FOR SEQ ID NO:1412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

```

GAATTCGGCC TTCATGGCCT AGTTTATT TGCACCTGGA AATATGTCAG AAATCACTTG      60
AAGGCAAATA AGATCTGGCC CTCTGCAGAG TTAAGTGGCT AACATGCCCT AGATCTCCAG      120
GCTTAGAGGC TGCCCTTTG GTACCCATGA TTCTCCAGGC CTTCCAGGG CAACATTGTC      180
CAGCATCTCT CTCTCTCCTC CCGCCGTCTT CTTTGGGAAG TTTGACTCTC ATGTGTGGTG      240
CCCGATCCCT AGGCCACCTG TGCCGGCCAG CCCCTGAACA GATAAATCCT ACTAAAGGTT      300
AATCCCAAGC ACAAGCTTTG GGCTGGTCTT TCTGGGTTGA TTGGCTTTCT CTCTCTCTCT      360
CCTTTTTTGA GATGGAGTCT CCTTCTGTCT CCCAGGCTGG AGTGCAGTGG CACAATCTCG      420
ACAATCTTGG CTCACTGCAA CCTCTGCCTC CCGGGTTCAA GCAATTCTCC TGCCTCAGCC      480
TCCTGAGTAG CTGGGATTAC AGGTGCCCCG CACTGCTTCT GGCATACTCG AG      532

```

(2) INFORMATION FOR SEQ ID NO:1413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

```

GAATTCGGCC TTCATGGCCT AGGCATCCAG GACAAAAGTT TGGAAAACAA AATAATGGAA      60
CTAAATAGTA CTAACCAAAG TATAGGGTGC TTTATGATTT ACAGAACTCT CTTACAGGCA      120
GTATGTTGTT CAGGCGCCAC TAGAACCCAC GTAATGGCAG AGGCTTCCTG TTCCATGTTT      180
AAAAACCTTT CCAAGGCTTT TCATTATTTT CTTATCTGTG GTACCCCTAG CTTCTGTGTC      240
TCTAGACACA CTGGCCTACC TTCAACTTCC TTGACCAGTG TAGCTTACAG TGTAAGCTTA      300
CCCCCGCCC CCACCCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

```

GAATTCGGCC TTCATGGCCT ACATGAACGG AAGAGTGGAT TATTGGTCA CTGAGGAAGA      60
GATCAATCTT ACCAGAGGGC CCTCAGGGCT GGGCTTCAAC ATCGTCGGTG GGACAGATCA      120
GCAGTATGTC TCCAACGACA GTGGCATCTA CGTCAGCCGC ATCAAAGAAA ATGGGGCTGC      180
GGCCCTGGAT GGGCGGCTCC AGGAGGGTGA TAAGATCCTT TCGGTAAATG GCCAAGACCT      240
AAAGAACCTG CTGCACCAGG ATGCTGTAGA CCTCTTTCGT AATGCAGGCT ATGCTGTGTC      300
TCTGAGAGTG CAGCACAGGT TACAGGTGCA GAATGGACCT ATAGGACATC GAGGTGAAGG      360
GGACCCAAGT GGTATTCCCA TATTTATGGT GCTGGTGCCA GTGTTTGCCC TCACCATGGT      420
AGCAGCCTGG GCTTTCATGA GACACGGCA ACTCGAG                                     457

```

(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:

```

GAATTCGGCC TTCATGGCCT AAAAATATCT AGTCACTGTT CTGTTTACC CATTCTTTTA      60
AACTTTGTTT TTCAGTTTCA GTCAGGCTTC CAAGAAAACCT GATAACATTT TGATTGGTTG      120
GTTTCTCTTA TATCTTTTTC ATTTACAGT ACATTGTGAT TTAATGATTT ATCTCTTAAA      180
TCTTTTTCAG TTCATAGGTT CCTCCTGTCT CTTTCTTTT CCTTGCACTT CATTGTTGTC      240
AGAACCTTGT TCCTGTGGTT TCGCACAGTC TGGAGGAATT GGGGAAAGTG GCTGTCTAAA      300
CTGGTTCCTT CCTTCCCAT ACTGCTGCAA TCAAGATGTT AGGGGGCCTA CAAGCAATAG      360
AAGCATCCTC GAG                                     373

```

(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

GAATTGGCCT TCATGGCCTA GTCATTGCT TTTATATCAG ATATCTAATT AATCAAACCT	60
TCTGGTTAAG TGCCTCCAAT TATTAACAAT CCTGCTCAGA GTTAAGATTA GCATCCAAGG	120
ATTTTCCTCC ATATTTCTTT TCAGAGGCAA TGGAATTTAC TAGTTTTTTA GCTCTTCAAC	180
TTTGGCTGAT GGTTTTAGTG GTGGTTATGC TATCTTCAGT AGTTTGGGGA TCGCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:1417:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

GAATTCGGCC TTCATGGCCT AAGAAAGGTT AAGTTACTTG CCTGAGGTAA CTTAGCATTG	60
ATAGAATTAG GATTTGAACC TGGGTAGTAT GACTCTTAGG TCCCCATGAG CTGGCACACA	120
GGTTGCCAAT CCATCAGTTA ACCTTCCCAT CACTGGGTCA GAGAGCCAAG GAGCAGAAGG	180
GGGATAGAAC TTCCCCAGTA CCAAACTAAG GGGCTGAGCT GGGATCGCAA CCACAGGTTT	240
TGTTCCAAAG CTGGGGCTCT TTCGACAAGG CCATGCCCGC CTTGTCTCTT ATGCATGCTC	300
CACTCGAG	308

(2) INFORMATION FOR SEQ ID NO:1418:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 174 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

GAATTCGGCC TTCATGGCCT AAACAAACAA AAAAAAATGT TTTATATGCA AAAGTTTTTT	60
GTATCATGCT TGTATAATC CAGCTTTTTT TGTATCATGC TTGTATTTT TTTTCTAGC	120
TGTTATTGCT TTTCTGATAA TAGTACTGAA TTTGGTGTTA TGGCTGGTCT CGAG	174

(2) INFORMATION FOR SEQ ID NO:1419:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 234 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

GAATTCGGCC	TTCATGGCCT	AATTTTATAT	TATTGTTAAA	CACTGGGCTG	GAATTATTGT	60
TTTGGGAAAA	GGCCCATGAG	AGTTTTTGCT	CTGTGGGTTT	TTAAAGGTAA	GAATAAATTT	120
CGTGTGTTGAG	ATGTTTTTGA	TGTGCCTGTA	ACCAGAAATAG	AAGTGTCTTA	GATTATAACT	180
TTCTCTCAGA	TTGAGTAATT	CTGTTGTAAT	AAGTCAGCAT	ATGTTGCCAT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:1420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

GAATAATTTT	TTACTTTTAT	AATTGATAGT	ATTTCTTAAC	TCTCAATTAA	AAAAAGTTTT	60
TAAGCATTTC	TGTGATATAG	ATACTATCAT	TTCATATTAC	ACAATGCTTC	TGATGATTTT	120
GCTGTTGTTG	TTAGGGACTA	CTCGAGGCAG	GTCTAGA			157

(2) INFORMATION FOR SEQ ID NO:1421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

GAATTCGGCC	TTCATGGCCT	ACCAGGATGA	GAGGGGAAAA	AGAAAGCCTC	CAGTGACTTC	60
AGTTGCTTTG	CCAGTTGTCT	TGGGATTGTT	TTACACCATC	CTTTACTTCC	CTTGCTCAGA	120
CCTCTCTGTT	TCACCATTGC	TCAGGCATTG	AGGAAAGTAT	CTGCTCACTC	CCACTTGGTG	180
AGTCCTCGGC	CTTGAGGTTG	CTGACTCTCA	GGCGTTAGGC	AGCTGGATGA	CTTCCCGCTT	240
CATGCAGCAA	AGGCCAGGGG	CTTGCGCGCC	TCTGCAGAGT	TGTTGCTAGG	GAGACTTGTTG	300
TCATCATCCA	CAACCTTGTT	TCTCACTTCC	TGGTTGGGCT	CATCTCTGAA	GAACAGGTCT	360
CCCAGCTTCG	CTCCTTATCA	CTGCATTGTG	AAGAGGAGGA	AAAGTGAATC	ACGGAGAGAG	420
AAAGGAAAGG	ATAGAATCAC	AGGCTGCATC	TGCACCTGAA	AAGTGACCCG	CGGAAACTCT	480
ATGGCGGATC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:1422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

GAATTCGGCC	TTCATGGCCT	AGACAAAAGT	AGAATTAGTA	AACTACTACA	TTGAGTACAC	60
TTTGTGTTAA	AATTCATAGG	GAAGACTTCT	TAAAACAAG	TGAAATTGTT	AAACCCCCC	120
CTAAGCATTG	CAGATGGCTT	ATAGCTGTCC	ACGGGGTTGG	TAGAGGTGGG	AAAGGGAAGG	180
GTTCTAGGCC	AGAATGTTCC	TATTTAGAAG	ACACTCAAAT	TACAGTCTGT	GTTATGTATG	240

TATACCATT	ATTCAATGCT	ACTGTGTATA	TAATGGAAAA	CTTAAGTCCA	GTTTGAAACA	300
TCTAGTCTTT	CTAGGTGTTT	AAAAGTGTAC	AACAGCCTGT	CGCAGTGGCG	CATGCCTGTG	360
GTCCCAGCAC	TTTGGGAGGC	CGAGGCAGGC	GGATCACGAG	GTCGGGAGAT	CGGGACCATC	420
TTGGCCAGCA	TGGTGAAACC	CCTCTCGAG				449

(2) INFORMATION FOR SEQ ID NO:1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

GGGAGTTTAT	TATTCATTAA	CGAAATTAGC	CCTTTTATCT	GCCATATAAT	TGCAACAAT	60
TTTATATCAG	CTTTTTTATT	GTCTTTTGGC	TGTTGTTATG	AAAGTTATGG	CCATGCAGAA	120
ATGTGGGATT	TTATGTAGCA	CAGTTGTCTC	TTTTTTTTTT	TTTGAGACG	GAGCCTAGCT	180
CTGTCAACCA	GGCTGGAGNG	CAGTGGCATG	ATCTCGGCTC	ACNGCAACCT	GTGCCTCCCA	240
GGTTCAAGCA	ATTCTTCAGT	CTCAGCCTCC	CAAGTAGCTG	GGACTACAGG	CGCCACCCC	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:1424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGGCC	TTCATGGCCT	AGAACTTTGT	ACACCATGGA	ATGTTCTACT	TATTATTTTG	60
TGCTACAATA	TGTGCTGTTT	CTTTTGTTTG	AATTGCAGAT	TGTCTACTAT	GAAGCAGGGA	120
TTATCTATG	CTGTGTCCTG	GGGCTGCTGT	TTATTATTCT	GATGCCTCTG	GTGGGGTATT	180
TCTTTTGAT	GTGTCGTTGC	TGTAACAAAT	GTGGTGGAGA	AATGCACCAG	CGACAGAAGG	240
AAAATGGGCC	CTTCCTGAGG	AAATGCTTTG	CAATCTCCCT	GTTGGTGATT	TGTATAATAA	300
TAAGCATTGG	CATCTTCTAT	GGTTTGTGG	CAAATCACCA	GGTAAGAACC	CGGATCCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:1425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGGCC	TTCATGGCCT	AGTATATCTG	AAAAGTACAC	TGTGTTTGA	AATTATAAAT	60
TTTCATTCTG	AATGAGGTTT	CTTTTTTTGA	TTTTCTTTAA	AAAAAAAAAA	CAACCTGCTT	120
TGATTTGCTT	TACATTCCCT	GCCCTCCATT	TTTCTTATTA	TATTGTAAAC	ATTAGAAAAA	180

TGAACACCCCT CGAG

194

(2) INFORMATION FOR SEQ ID NO:1426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

```

GAATTCGGCC TTCATGGCCT AGCCATGTAT TTTCTAATAT CCCTTGGACT TCATCTTTGA      60
CTCATGTTTT ATTTTGAAGT ATTGGGATTG TTTTTCAGTT ATCTTTCTGT TATTATTTCT      120
ATTTAATTCT GTTATGGTCA TACAACATAA TTAAATTCT TCTAAATTG TTGAGGATTG      180
TTTTTGTTGC CCAGAATATG ATGAATCTCT CATGAATGT TGTATGTGCA GTGAAAAGA      240
ATGTTTATTC TGCTGTTGGT GGGTAAAGTG TCATGAATAT AATTAGGAGA AATTAATGAT      300
AGTGTTAAGG TTTTCTATAT CTTGCTTTT TTGGTGACT TATTTTATTG ATTATTGAGA      360
GAGAAGGGTT GAATTATCTA GGTGCAACTC GAG                                     393

```

(2) INFORMATION FOR SEQ ID NO:1427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCCA CCCCGTTAAT GTGTGTGTG ACAGTGAAGT      60
CCTTGGGTGG GGCCATGTGT GTGTTGTGTA TGTTCCTTAA GTTGATGCAG CTTCTCGAG      119

```

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

```

GAAAAAGCAG TAAAAATAGA AATCCATCTT CACCAAGCCT TTAAAGCAAT ATAAATTTAT      60
ACTGAGGTTT CTGCATACTA TAACACACAG AAGGAATTCC TAAAAATGTT CTTTATCCAG      120
CTGTCTACCC AAAGTTCTAT CATCCTGGCA AACTGCTCTC TCCAAAATTC ATCATCTTGG      180
ACTCTCTCTG AAACCTCAAC CCTTCTCTCT TATACCCTGT TCTCCAACAT TCGAATTTGT      240
TTAGTTTGTC TTCTTCCTAA TATAGCTATT TCTGTTTACC ATTTTGAGCT CTGGAACCTC      300
AACCACACT TACCACCAA ACTCGAG                                     327

```

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

```
GAATTCGGCC TTCATGGCCT AATCACATAT ACACAATTTA CCCATTTCAA GTGTACACGT      60
AGTGGTTTTA GTATATTTAC AGATAGGTGC AACTATCACC ACAGTCAAAT TTAGAACCTT      120
TTCATCAACC CCAAAGAAA CACCATACCC TTTAGGTATC GCCTCCCCTA TACTCCACCT      180
TCCAACCTGCT GAGCCCTAAG TTACCACTAA CCTTCCTATC TCTATAGATT TCCTTATTCT      240
GAACTTTTGA ATGGAATTAC AGTATCTGGT CTTTGTGCCC TGTTTTTTTT TGAATAATGT      300
TTCAAGGTTT ATCCAGGCC TCGAG                                         325
```

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

```
GAATTCGGCC TTCATGGCCT ACCTAAACCT GGCAGAGTAC ATCATGCCTC CGAGAAGAAA      60
CGTCATTCCA CTCCTTTGCC GAGCACTGCT GTACCAAGCC ATACACCTGG CAGCAGCCAG      120
CAGTCCCGC TCAACAGTCC TCACCCGGGG CCCATCCGGA CAGGCCTGCC TCCTGGGCAC      180
CAGCAGGAAT TTGCCGGACG AGCCAACAGC ACCTCCAACC CTCGAG                                         226
```

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

```
GAATTCGGTT CATGGCCTAG GATTAACAAC TTGGAAAAGG CCTATGATAC TCCTGGTAAA      60
CCTCTTTGTG CTGCTCTCTG TGGTTTGTGT CCTCTTAAAT CTAGCTGGAT TTATCCTAGG      120
CTGCCAAGGG GCCCAGTTTG TGTCCAGCGT GCCCAGGTGT GATCTGGTGG ACTTAGGTGA      180
AGGCAAGATT TGCTTCTGTT GTGAAGAATT TCAACCAGCC AAGTGCACAG ACAAAGAAAA      240
TGCCTTGAAA CTCGAG                                         256
```

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

```
GAATTCGGCC TTCATGGCCT AGGTTGCGGT GAGTCGAGGT CTGCACTCCA GTCTAGGTGA    60
CAGAGCCAGA CCTGGTCTTT AAAAAAAAAA AAAAAAAAAA AGTGAATTCA AAAGATTAGC    120
TAAGACAAAT TGGGAAAAAA AACCAAAGG GGAGTTGACC TAACAGATAT TAAGATGTAT    180
TTCTAAAGCC ATAGCAGCTA AAATAGTACA GTATTAATGT AGGGACAAAC AGAACTCGAG    240
```

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

```
TCATTCTGAA CAAAAGGGAT TAGAGAAGAA AAATCTCTTG ATATAAGGCT TGAAAGCAAG    60
GGCAGGCAAT CTTGGTTGTG AATATTTTCT GATTTTTCCT GAAATCAAGC AGAAGATTGA    120
GCTGCTGATG TCAGTAACT CTGAGAAGTC GTCCTCTTCA GAAAGGCCGG AGCCTCAACA    180
GAAAGCTCCT TTAGTTCCTC CTCCTCCACC GCCACCACCA CTCCTCGAG    229
```

(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

```
GAAATTGAAA CTCAAATCAG TTAGCTTCAA ACAAAAACGA AAGTTAGACC AAGGGAACGT    60
ATTAGATATG GAAGTAAAGA AAAAGAAACA TGATAAACAA GAACAGAAAG GAAGTGTGGG    120
AGCTACATTC AAATTAGGTG ACTCTTTGTC AAACCCAAAC GAAAGAGCCA TTGTTAAAGA    180
AAAGATGGTA TCAAATACTA AGTCTGTAGA CACGAAAGCG AGTTCATCTA AATTTAGTAG    240
AATTCTAACT CCTAAGGAGC ATCTCGAG    268
```

(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

```
GAATTCGGCC TTCATGGCCT ACAAGACTGT CTCAAAAAGA AAAGAAACAC AAATATTTGA    60
ACTCCAAATA TTCTTTGTGT GTAGAAAAAT CTAATGGATA ATTAAACTA GAGCAGAGAG    120
```

AAAAGCCTAG GAGTTGAGAG ATTTTATAGAT ACGTGACTGA AAAGATTGGA AAAGGCTATC	180
AGTTTAAATG CTTGTGTCTG TCTTTGTGTG GGCCATGGTA TTTTGGAAGA GCACCATGGA	240
GCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:1436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

GAATTCGGCC TTCATGGCCT ACCTATTTGT GCATCAAGTG GTTATCTAAA TAGTTTGAAA	60
GGATTGATAT ACTACATTAT ACGTCAAAAA TAAATAAATA AAATTAAGAA GACAGGGATT	120
CCAAGATTGT AGCTGACCAA GCTGTCTTGT TTTGCGTACA TCAACACTAT GCTGCTTCCA	180
ATATTCCTAG CCATTCACA GGAATGATT TTTCAACAAT CAAGAGAAAG TCATTCTTGT	240
ACTGTAACAT CTCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

GAATTCGGCC TTCATGGCCT AAATCACTTG GATTGGTTCT CTACTTAAAA CACAAGCTAG	60
CTACCCAGTC TTGTATTTTG TATTTTAAAG AATTGTTAAA AAACCTAATT TGTTTGTAT	120
TTGTGTAAAG CATAGTCATA ATTCTAAATC AACACACTG CATCGAGTTT ATCACTGAAA	180
TTCAGCATCT GCTTTTGTCC TCACTTTTGT ATCTTCTGCT CTCATCGATT ACAGGCGTGA	240
GCCACCGCGC CCGGCGGTAT GTTCCTTACC CTTAAGGACA AGAAATACCG TTTGAAAACA	300
TTCTTCTTGA ACATTAACAA ACTTAGAATG GTACATTCAT TTAAGAATTA AAATAGGCAC	360
AAGAGGATTG AATTTTGGAA ATATGTTGCT TAGAAATTG GGGGCAATTC TCGAG	415

(2) INFORMATION FOR SEQ ID NO:1438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

GCGATTGAAT TCTAGACCTG CCTCGAAGTG CCAGCAGCAG AGGAGATGAC AGTGACATAT	60
ACAACAGAGG CTGGGGTGGG CACTCCAGGA GCCCTGGAGC GGAAGACCTC AGGGCTAGGA	120
CAGGAGCAAG AGGAAGGGTC AGAGGGCCAG GAGGCAGCCA CTGGGAGTGG CGATGGGAGG	180
CAGGAGACAG GAGCAGCTGA AAAATTCCGA TTAGGATTAT CACGGGAGGG AGAGAGGGAA	240
TTGAGTCCGG AGAGTCTACA GCTCGAG	267

(2) INFORMATION FOR SEQ ID NO:1439:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

```
GCGATTGAAT TCTAGACCTG CCTCGAGTCA TATCCCTGAG CAGTAGAGTA AATTAAATCC      60
TTTCTGAGAG TCTTAGATGT TTTTCTATGT CTCTTCTTTC TTATTCTCTC TCTGTTTCTT      120
TCTCTCACTC ACACACACAC ACACACACAC ACACACACCC CTAAAATTG TTCTGAATGG      180
CCCACTAGGG CTGAATCATT TAGTGACTTC ATTGATTACT ATCCTGAGTT CTCTTCTCTG      240
CTTCCAGACT AGTGAAAATA TTCCAGAAAG CTTAATATT GGAGAAAAGG CAACGCTCGA      300
G                                                                                   301
```

(2) INFORMATION FOR SEQ ID NO:1440:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 251 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

```
GAATTCGGCT TCATGGCCTA GCATTGGAA GTAATTTTTT AAAACAACAT TCATATTAAT      60
TTAAGGAGCA TAACAGATTC CAGTGAATGT TATGATTCGC TATTGTAACA TTATTCTAGT      120
AAATATGTTG GAGAAGAACA GTTCTAGTGA ATTAACATAG GTTTGGAAG GCAGCTATGC      180
TCACCATCAT ACCACCAACA CAACCATGGT TTTATTTTAT ATTATTTTATT TTATTTTGA      240
GACAGAGTCT C                                                                                   251
```

(2) INFORMATION FOR SEQ ID NO:1441:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 274 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

```
GGAATTGGAA AGCGTTTCCT TGCCAACACC AGAAATCCAG TCAGATTTCT TACATAGCAA      60
AGTCGAAGCT CCTCCTTCAG AGGTGGCGGA TACGTTAGTA ATAATGACTG CTTCCAAGGG      120
TGTTGCACTC CCAGAACCCA AAGATAAGAT TTTGGAGACA CCTCAGAAAA TGACAGAAAA      180
ATCTGAATCA AAGACACCAG GAGAAGGGAA AAAGGAAGAT AAAAGCAGAA TGGCAGAACC      240
AATGAAAGGC TACATGAGAC CCACCAAGCT CGAG                                                                                   274
```

(2) INFORMATION FOR SEQ ID NO:1442:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 274 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

```
GAATTCGGCC TTCATGGCCT ACCTTTCTCC ATGTTTAACT GGGCTGCTCC CCATTCTCTG      60
CCTCCCTGTC TCCTCAGCCG CCAGAGCCCA GCCCCTCCGA CCAGGCCTCA CCCACCCCCA      120
CCCGACCCTT CCCTGAGGGT CCTTTCCTCA GTACCACTGA CACTTGGAGG CAGGAAACCC      180
AAACCTCCTT AACTAAGGCC TCATTACCT CGAAAGCAGT GGTGCTTCCC TCTGTTTCATC      240
CAGGGCCATA AAGCCACTGT CCCCTTAACT CGAG                                     274
```

(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

```
GAATTCGGCC TTCATGGCCT AATTGCGCCA TTGCACTCTA GCCTGGGCGA CGGAGCAAAA      60
CTCCATCTCA AAAAAAAAAA AAAAAAAAAANN NANTCNGAAA CAGAAAAAAAAA AAAAAGAATA      120
CACTGCATTG CCATTATCTA GTCACCCTGT GTAATATAGC AGCAGAACTC ATGCTTCCTG      180
TCTTAACTGT AACTTTGTAT CTGCTGACCA ACCTCTCTCC ATCCCCTCCT CCCACCTACC      240
CTCCCCAGTC CCTCGAG                                     257
```

(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 258 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

```
GAATTCGGCC TTCATGGCCT AGGAAGCATT AAATTGGGCC ATAGGAAGGA CAAGTCACAT      60
CCAGTTTGTG GATCAATGGT GGTGTTGGGA AGAAATAACA GAATTCTACT CCTACATGAT      120
AGGGAGAGAC TACAGAGGCC ACCTAGACCA ACAAACCTCTG CCATCAGGTC CTTGAATCAT      180
TGCTACCATG TCCTGGTGGT GGTGTTAGCA TTGCTAGTGA TATGTAATC ATTACCTACT      240
TATGCAAACC ATCTCGAG                                     258
```

(2) INFORMATION FOR SEQ ID NO:1445:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 638 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

GGATGGCTAC	GGCAGGGGGT	GGCTCTGGGG	CTGACCCGGG	AAGTCGGGGT	CTCCTTCGCC	60
TTCTGTCTTT	CTGCGTCCTA	CTAGCAGGTT	TGTGCAGGGG	AAACTCAGTG	GAGAGGAAGA	120
TATATATCCC	CTTAAATAAA	ACAGCTCCCT	GTGTTCGCCT	GCTCAACGCC	ACTCATCAGA	180
TTGGCTGCCA	GTCTTCAATT	AGTGGAGACA	CAGGGGTTAT	CCACGTAGTA	GAGAAAGAGG	240
AGGACCTACA	GTGGGTATTG	ACTGATGGCC	CCAACCCCCC	TTACATGGTT	CTGCTGGAGA	300
GCAAGCATTT	TACCAGGGAT	TTAATGGAGA	AGCTGAAAGG	GAGAACCAGC	CGAATTGCTG	360
GTCTTGCACT	GTCTTGACC	AAGCCAGTC	CTGCCTCAGG	CTTCTCTCCT	AGTGACAGT	420
GCCCAAATGA	TGGGTTTGGT	GTTTACTCCA	ATTCCNATGG	GCCAGAGTTT	GCTCACTGCA	480
GAGAAATACA	GTGGAATTCG	CTGGGCAATG	GTTTGGCTTA	TGAAGACTTT	AGTTTCCCCA	540
TCTTTCTTCT	TGAAGATGAA	AATGAAACCA	AAGTCATCAA	GCAGTGCTAT	CAAGATCACA	600
ACCTGAGTCA	GAATNGGTCA	GCACCAACCC	GACTCGAG			638

(2) INFORMATION FOR SEQ ID NO:1446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

GCGAGCTCGT	GTTTTAAAGG	ACCAAATAGA	AGTTTACCAG	GAGAGAAGTG	ACAGAAGTGC	60
TGTCTAGATA	GAGGAAGGGC	ACACACAGAT	GCAAGCATGT	GCAGAAATGA	GCAAACCACT	120
GAGACGCTGC	CTTGAGCTCT	GTGTCACACT	GCTATGTTGC	AGCCTGGGAG	GCTGTTCCCA	180
GTTGAGCCCT	TCGGAACCAG	CCATGAGATG	GCACGGGTAC	GCGGAAGGGA	GCAGTCTCCA	240
TGGCTGGGTG	GTGATGGGGG	CTTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:1447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

GGTCTCTCGC	CGCCGGAGGA	AGATGAGGCT	GAAGATTGGA	TTCATCTTAC	GCAGTTTGCT	60
GGTGGTGGGA	AGCTTCCTGG	GGCTAGTGGT	CCTCTGGTCT	TCCCTGACCC	CGCGGCCGGA	120
CGACCCAAGC	CCGCTGAGCA	GGATGAGGGA	AGACAGAGAT	GTCAATGACC	CCATGCCCAA	180
CCGAGGCGGC	AATGGACTAG	CTCCTGGGGA	GGACAGATTC	AAACCTGTGG	TACCATGGCC	240
TCATGTTGAA	GGAGTAGAAG	TGGACTTAGA	GTCTATTAGA	AGAATAAACA	AGGCCAAAAA	300
TGAACAAGAG	CACCATGCTG	GAGGAGATTC	CCAGAAAGAT	ATCATACTTC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

```

GAATTCGGCC TTCATGGCCT ATCCTCTGCC AAGACCAAAA GGAAAGAAGA AAAAGGGCCA      60
AAAGCCAAAA TGAAACTGAT GGTACTTGTT TTCACCATTG GGCTAACTTT GCTGCTAGGA      120
GTTCAAGCCA TGCCTGCAAA TCGCCTCTCT TGCTACAGAA AGATACTAAA AGATCACAAC      180
TGTCACAACC TTCCGGAAGG AGTAGCTGAC CTGACACAGA TTGATGTCAA TGTCCAGGAT      240
CATTCTCTGG ATGGGAAGGG ATGTGAGATG ATCTGTTACT GCAACTTCAG CGAATTGCTC      300
TGCTGCCCAA AAGACGTTT CTTTGACCA AAGATCTCTT TCGTGATTCC TTGCAACAAT      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

```

GATTTCTTAC CCAAAGCTCT GGAATTGTAC ATTTATTTT TAAAACTCAA AGAGGGAAAG      60
AGCCTTGAT CATATGTGAA CATGTATCA TAGGTAATGT TGTACAGACC CTTTATACA      120
GTGATCTGTC TTGTTCTGTC AGCAAAAATC CTCTATGGAC ATAGGAGGTG CTGTGTCCCA      180
TGCCCTCTTG CCCTGACAGT GTCCCATGGG CCCCTTCTG CTCCTGCCC CCTCCCTGCT      240
ACTGCTGATG CACTCCCCC CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACC TGGGGGAGA TTGGGCTCCC TTTCCTCATG      60
ACATCCTGCC CTATCAGGAC TCTGGAGATA GTGGGAGCGA CTACCTTTTC CCAGAAGCTA      120
GTGAAGAATC AGCAGGCATC CCGGGAAGT CAGAACTTCC CTACGAAGAG CTGTGGCTGG      180
AGGAAGGCAA GCCCAGCCAT CAGCCTCTCA CTCGCTCTCT GAGCGAGAAG AACAGATGTG      240
ATCAGTTTAG AGGTTCTGTC CGATCCAAAT GTGCGACTTC TCCTCTTCCC ATCCCTGGGA      300
CTCTGGGAGC AGCAGTGAAG TCTTCAGATA CTGCCCTACC TCCACCTCCA GTGCCTCCCA      360
AATCTGAAGC CGTCAGAGAA GAATGCCGGC TCCTGAACGC CCCACCTGTT CCACCCCGAA      420
GCGCACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:1451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

GCCTGCCCC	ACCTTACAGG	TCTGGGATGT	ACCTTTCCAT	CTGTTGCTGC	TTTCTTCTAT	60
GGGCCCCCTGC	CCTCACTCTC	AAGAACCTCA	ACTACTCCGT	GCCGGAGGAG	CAAGGGGCCG	120
GCACGGTGAT	CGGGAACATC	GGCAGGGATG	CTCGACTGCA	GCCTGGGCTT	CCGCCTGCAG	180
AGCGCGGGCGG	CGGAGGGCGC	AGCAAGTCGG	GTAAGTACCG	GGTGCTGGAG	AACTCCGCAC	240
CGCACCTGCT	GGACGTGGAC	GCAGACAGCG	GGCTCCTCTA	CACCAAGCAG	CGCATCGACC	300
GCGAGTCCCT	GTGCCGCCAC	AATNCCAAGT	GCCAGCTGTC	CCTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

GGGGCAGAAG	TTGAATATAC	CGGCAATTTT	GCGAGCACCC	AAGGAGAGAA	AACCAAGTAA	60
AAAAGAAGGA	GGCACACAAA	AGACATCTAC	TCTTCCTGCA	GTACTTTATA	GTTGTGGGAT	120
TGTAAAGAAG	AACCATGATC	AGCATCTTCT	TTTATTGTGT	GATACCTGTA	AACTACATTA	180
CCATCTTGGA	TGTCTGGATC	CTCCTCTTAC	AAGGATGCCA	AGAAAGACCA	AAAACAGTTA	240
TTGGCAGTGC	TCGGAATGTG	ACCAGGCAGG	GAGCAGTGAC	ATGGAAGCAG	ATATGGCCAT	300
GGAAACCCTA	CCAGATGGAA	CCAAACAAC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:1453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

GCGATTGAAT	TCTAGACCTG	CCTCGAGATC	CCCATGACTC	CTACATCCTC	TTTTGTGTCT	60
CCGCCACCAC	CCACTGCCTC	ACCTCATTC	AACCGGACCA	CACCGCCTGA	AGCGGCCAG	120
AATGGCCAGT	CCCCCATGGC	AGCCCTGATC	TTAGTAGCAG	ACAATGCAGG	GGGCAGTCAT	180
GCCTCAAAAG	ATGCCAACCA	GGTTCCTCC	ACTACCAGGA	GGAATAGCAA	CAGTCCGCC	240
TCTCCGTCCT	CTATGAACCA	AAGAAGGCTG	GGCCCCAGAG	AGGTGGGGGG	CCAGGGAGCA	300
GGCAACACAG	GAGGACTGGA	GCCAGTGCAC	CCTGCCAGCC	TCCCGGACTC	CTCTCTGGCA	360
ACCAGTGCCC	CGCTGTGCTG	CACCTCTG	CACGAGCGGC	TGGAGGACAC	CCATTTTGTG	420
CAGTGCCCGT	CCGTCCCTTC	GCACAAGTTC	TGCTTCCCTT	GCTCCAGACA	AAGCATCAAA	480
CAGCAGGGAG	CTAGTGGAGA	GGTCTATTGT	CCCAGTGGGG	AAAAATGCCC	TCTTGTGGGC	540
TCCAATGTCC	CCTGGGCCTT	TATGCAAGGG	GAAATTGCAA	CCATCCTTGC	TGGAGATGTG	600
AAAGTGAAAA	AAGGAGAGCG	ACTCGAG				627

(2) INFORMATION FOR SEQ ID NO:1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

GAACCTTGAC	ACCTACACTT	AAATTCTGAG	TCATTAAACA	GGCCTACATT	TATCAACTGT	60
GGAAATATCA	GCCAGTTTTT	GCAAACCTCT	TCTTAGGACA	CTAAGTTGTT	TGCAGAAATC	120
ACTAGCATTG	ACTGACTCAG	CAACAATGTG	GTTATATTCT	TTGATTAACT	TAGTCCTTTT	180
TCTTGGTCAA	GAGTCAGTAG	ACAGGACTGA	AGCTTATGCC	CCTTGCCCCC	CCACCACCAC	240
TCCATTACTA	CCACCTTGGT	TTAGCCATCC	TTTCTTGATC	TGTTCTCCCC	ACTTCTACTG	300
TGCTACTCTA	CAGACTTGCC	CTGAATGTAA	GAGCAACAAT	TACCTTGTA	AGTCCAAGTT	360
GGGCGAGGTC	ACTCCCAAAC	TCCACAACCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:1455:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 381 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

CAGATGTTCA	GATATATCTT	GAATTTTCTA	CGAACATCCA	AACTCCTCAT	TCCTGATGAT	60
TTCAAGGACT	ACACTTTGTT	ATATGAAGAG	GCAAAATATT	TTCAGCTTCA	GCCCCATGTTG	120
TTGGAGATGG	AAAGATGGAA	GCAGGACAGA	GAACTGGTC	GATTTTCAAG	GCCCTGTGAG	180
TGCCTCGTCG	TGCGTGTGGC	CCCAGACCTC	GGAGAAAGGA	TCACGCTAAG	CGGTGACAAA	240
TCCTTGATAG	AAGAAGTATT	TCCAGAGATC	GGCGACGTGA	TGTGTAATCT	TGTCAATGCA	300
GGCTGGAATC	ACGACTCGAC	GCACGTATC	AGGTTTCCAC	TAAATGGCTA	CTGTCACCTC	360
AACTCAGTCC	AGGTCCTCGA	G				381

(2) INFORMATION FOR SEQ ID NO:1456:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 309 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

GGTGACGCCT	GCTTCACATC	TCTAATGAAC	ACCCTCATGA	CGTCGCTACC	AGCACTAGTG	60
CAGCAACAGG	GAAGGCTGCT	TCTGGCTGCT	AATGTGGCCA	CCCTGGGGCT	CCTCATGGCC	120
CGGCTCCTTA	GCACCTCTCC	AGCTCTTCAG	GGAACACCAG	CATCCCGAGG	GTCTTCGCA	180
GCTGCCATCC	TCTTCCTATC	ACAGTCCAC	GTGGCGCGGG	CCACCCCGGG	CTCAGACCAG	240
GCACTGCTAG	CCCTGTCCCC	TGAGTATGAG	GGCATCTGGG	CCGACCTGCA	GGAGCTCTGG	300
TTCCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:1457:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 374 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

GCACTATTAA	ACAGATACAA	CACAGAATAG	TATGTATAGA	GCATGGTATG	TAGCAGGGGC	60
CTATTCCTGT	CTGAGTGGAC	AAGGAGGCTT	CCTAGAGGAA	GCAACATTTA	AAGCTGAGGG	120
CTGAAGGATG	AATAGGATTT	AACCAAGTAA	AAGTAAGAAA	GGAAGTGGGG	AGCTGGAAAG	180
GGCATTCCAG	GAAGAAGAAA	CTGCATGTGC	AAAGGCCAGG	AGGTCAGAGC	GCACAGTGGA	240
TATGACGATG	TGGCTAGCTG	AGCATGTCTG	TGCAGTGTCA	ACTTTGTTGT	GAACACAGAG	300
GGAGGCTACT	GGGAAATTTT	AAGCAAGAGA	GTTGGAGTAT	GATCACATTT	GCATGTTAGA	360
AAGACACACT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:1458:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 316 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

GAATTCGGCC	TTCATGGCCT	ACATATTTAT	TATGTCAACC	TGTACTTCCC	TTTCCCTCTT	60
CCTCTCCCTC	TTTTCTCTCC	CTCTCCCTCT	CTCTCTCTTC	CTTCCTCCCC	TTCCAGGTAC	120
CCTAGATGAA	CCATGGGAGG	TCCTGGCTAC	ACAGCCATTC	TGTCTGAGAG	AGTCTGAGGA	180
CTCTGAGACC	CAGCCTTTTG	ACACGCACCT	TGAGGCCTAT	GGACCTTGCC	TGTCTCCACC	240
TAGGGCAATA	CCAGGAGACC	AACATCCAGA	GAGCCCAGTT	CACACAGAGC	CAATGGGGAT	300
TCCGGGCAGG	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1459:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 417 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

GGAACCACCA	ATTCGGGACA	CACTGGGATT	ACAGTTCAG	GAAGGATGTT	ACCTTTGACG	60
ATGACAGTGT	TAATCCTGCT	GCTGCTCCCC	ACGGGTCAGG	CTGCCCAA	GGATGGAGTC	120
ACAAGGCCAG	ACTCTGAAGT	GCAGCATCAG	CTCCTGCCCA	ACCCCTTCCA	GCCAGGCCAG	180
GAGCAGCTCG	GACTTCTGCA	GAGCTACCTA	AAGGGACTAG	GAAGGACAGA	AGTGCAACTG	240
GAGCATCTGA	GCCGGGAGCA	GGTTCTCCTC	TACCTCTTTG	CCCTCCATGA	CTATGACCAG	300
AGTGACAGC	TGGATGGCCT	GGAGCTGCTG	TCCATGTTGA	CAGCTGCTCT	GGCCCTTGGA	360
GCTGCCAACT	CTCCTACCAC	CAACCCGGTG	ATCTTGATAG	TGGACAAAGT	GCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:1460:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 222 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC	TTCATGGCCT	ACTGAGAAAA	AAAATCAAAT	CTAATTTTAA	AATGAAGGTA	60
TTTAAAACCA	TGGCACAAGG	GAGCCTTATT	TATGGAGCTG	GTGGGAAGCC	AGGATGTTTC	120
CAATCCGCTG	CTCTTACAGG	AGCCTGTGCC	TCGCCAGTTC	TGTGCTGCAG	TGGGCAGCCA	180
ACTGAAGTGC	ATGAGTCAAA	TGCACGAAGC	AGCAGACTCG	AG		222

(2) INFORMATION FOR SEQ ID NO:1461:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GCTGCCTCCA	TACTGTTTTA	GGCAGCACCG	TTTATGTGAC	AGAGTCCCTG	TTTCTCAAAT	60
GCATGGTGTT	CCTCAGGTGG	AGAGTGGGCA	GAAGTTTTTG	CAACACTTTT	TTTTTAAGTT	120
ATTGGGTGCA	AAATCCCAAA	CCAGGATATG	TGTATGTCTG	TGTGTTTATG	TTTTTTATT	180
GACCTCCTCC	TCTTTCAACC	TACCCCTTT	TATATCTAAT	GTAGAAAAAG	CGAATTGAA	240
TCTGGAAAAA	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1462:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GGGGGTGGAA	GGCGTAGTGC	TTGAAATGCA	GGGATCTGGC	AGTCAGCAGA	AGGATCTGAG	60
ACCCAGTGTC	GAGGTAAAA	AAAAAACAAA	AAACCAAAAA	CCAATGCAGG	AATCCAGTGG	120
GTGGAGTGAG	GGGATCTGGG	ATCCAGTGAT	GGGGGCCCCA	GGATCCAGGC	ATTGTGGTTG	180
TCAGGATCCA	GTGGTGAGGT	TTGTTGACAT	CCAGAATCCA	GCAGCTGAGC	TTGGAGATCC	240
AGGGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:1463:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTCGGCC	TTCATGGCCT	AAGTTTATAA	AAATTCAGC	CAGAAAAACC	CAGGTAAGGA	60
TTTTTTTAT	TTTTTTTTTA	TTTTTATTT	TAGACCAGGT	GAGAATCCTT	TGTTCCACTG	120
AGATTTTAA	ATTTAGTACA	TTCAAAATG	ATATTTCTAC	CATTTTCTCA	GCCTGCTTGT	180
CTTCTTATCT	TTGCAGCACT	GCTTATTGCC	ATCACTGCTT	ATCTGTTTAC	TCAACTTGAA	240
ACCTCAGAAT	TGTCCTTGAC	CTCATCCCCA	CATCTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC	TTCATGGCCT	AGGCCATTG	GTTCTAACT	GCTTGACTAG	TTTAAAGCTC	60
ACATAATTCC	TTAAGCTTTC	ATATTTTCTT	AAATGCAAGG	AAATGAATAT	AAAAGCACTA	120
AATCTCCTGG	TTCCTGGTA	CAAAAATTAC	AATGGTCAGT	TCCCTTAGGT	CATCAAAAAC	180
TAGTCACAAA	AATAGTTCTT	GTATTCAACC	TGAATGTGCC	ACAGGAAAAA	AAAAATATT	240
TCAAGATTTT	CCAGCTCAGC	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:1465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC	TTCATGGCCT	AAACATTTTC	TGAAAAACGT	GATAGAAAGA	AGGAGGAGCT	60
GTTTCTAGGA	GGGAAATAAA	TAATTGGCA	GGAGACTTTT	TGAACTAGAT	ATCTATTGAA	120
TAACAAAGTG	ACAATGTTCC	CCATCCTCTC	ATTTCCATT	CCAATTTTAC	TTCTCGTCCC	180
AATTCAAATC	ATTCTTACTT	ATGATCGGCG	CTATGTCAGT	GCCTCTCAGC	TGGTCTTCCC	240
AGACCCAGTC	ACCCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:1466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

GCGCCTATCA	CAAGCAGATC	ATGGGTGGCT	TCAAGGAGAC	GAAGGAGGCT	GAAGATGGCT	60
TCCGCAAGGC	CCAGAAGCCT	TGGGCCAAGA	AGATGAAGGA	GCTGGAGGCA	GCCAAGAAGG	120
CCTACCATTT	GGCTTGCAAA	GAGGAAAAGC	TGGCCATGAC	ACGGGAGATG	AACAGCAAGA	180
CGGAGCAATC	GGTCACACCT	GAGCAGCAAA	AGAAGCTGCA	GGACAAAGTG	GACAAGTGCA	240

AGCAGGATGT GCAGAAGACA CAGGAGAAGT ATGAGAAAGT GCTGGAAGAT GTGGGCAAGA 300
CCACACCCCA GTACATGGAG AACAAACTCG AG 332

(2) INFORMATION FOR SEQ ID NO:1467:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 301 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GCTCGAGATG TGCTGTCTTC CATGCAAAGT GGAATTTGAC AATCACTGTG CCGTGCCTTG 60
GGACATCCTG AAAGCCAGCA TGAACACATC CTCTAATCCT GGGACACCGC TTCCGCTCCC 120
CCTCCGAATT CAGAATGACC TCCACCGACA GCAGTACTCC TATATTGATG CCGTCTGTTA 180
CGAGAAACAG CTCATTGGT TTGCAAAGT TTTCCCTAT CTGGTGCTCT TGCACACGCT 240
CATCTTTGCA GCCTGCAGCA ACTTTTGGCT TCACTACCCC AGTACCAGTT CCAGGCTCGA 300
G 301

(2) INFORMATION FOR SEQ ID NO:1468:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 436 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCGGCC TTCATGGCCT AGTGGAAAAT GGGAGGCATG AAATACATCT TTTCGTTGTT 60
GTTCTTTCTT TTGCTAGAAG GAGGCAAAAC AGAGCAAGTA AAACATTTCAG AGACATATTG 120
CATGTTTCAA GACAAGAAGT ACAGAGTGGG TGAGAGATGG CATCCTTACC TGGAAACCTTA 180
TGGGTTGGTT TACTGCGTGA ACTGCATCTG CTCAGAGAAT GGGAAATGTGC TTTCAGCCG 240
AGTCAGATGT CCAAATGTTT ATTGCCTTTC TCCTGTGCAT ATTCCTCATC TGTGCTGCCC 300
TCGCTGCCCC GAAGACTCCT TACCCCCAGT GAACAATAAG GTGACCAGCA AGTCTTGCGA 360
GTACAATGGG ACAACTTACC AACATGGAGA GCTGTTGTA GCTGAAGGCG TCTTTCAGAA 420
TCGGCAACCA CTCGAG 436

(2) INFORMATION FOR SEQ ID NO:1469:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 297 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

GAATTCGGCC TTCATGGCCT AGTCTGGGCA ACAGAGCGAG ACCTTGCTCTC AAAAAAAAAA 60
AAAAAAAAAC AAAGTAAAAA AAGATATGTG TTTGATTAAT AACAGTCCTG ATTTAAACA 120
ACAGCACTGT CTTTGGAGCC TTCCTCAGT ATGCAACTCC TTTATACAGA TTTTATTTTA 180
ATTTTATAA CACACTGCTT GAGAAGCATA TTTATTCCG TTTTGTGTG TGCATGTGGT 240

GGACAGGAAA CAGTGGTTCA GAGAGATGAA GCACCCCTGCC CACCACATGC ACTCGAG 297

(2) INFORMATION FOR SEQ ID NO:1470:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

GAATTCGGCC	TTCATGGCCT	AGGACCTATT	CTATCAGCAG	CATTGACAC	CACTGATTAC	60
TCATTCTGCT	CTGGTGTACT	TTCTTCAATT	GCTTCCAAGA	CACCATAAAT	TCTTCTGCCT	120
TGCTGGCTGC	CTTGCTGGT	TCCTCCTCTT	CTCCCTGACC	TCTTAATGTT	GGAGAACCAC	180
AGGGCTTAGT	CCTTGGTCCT	CTTCTCTCTT	TTCTTTACAC	TGTGGTCCTC	AGTGAGGGAG	240
ATAGGTAGAT	CACTGTCCC	GATCTTAACC	CAAAGAAAGA	CTTGCTGTCC	AGCTACGGGG	300
GCTGTGTCA	GAAGGCAGCC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1471:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 421 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

GAATTCGGCC	TTCATGGCCT	ACAAAAGGAT	GGGAAATGCC	TGCATTCCCC	TGAAAAGAAT	60
TGCTTATTTT	CTATGTCTCT	TATCTGCGCT	TTTGCTGACT	GAGGGGAAGA	AACCAGCGAA	120
GCCAAAATGC	CCTGCCGTGT	GTAATGTAC	CAAAGATAAT	GCTTTATGTG	AGAATGCCAG	180
ATCCATTCCA	CGCACCGTTC	CTCCTGATGT	TATCTCATT	TCCTTTGTGA	GATCTGGTTT	240
TACTGAAATC	TCAGAAGGGA	GTTTTTTATT	CACGCCATCG	CTGCAGCTCT	TGTTATTTCAC	300
ATCGAACTCC	TTTGATGTGA	TCAGTGATGA	TGCTTTTATT	GGTCTTCCAC	ATCTAGAGTA	360
TTTATTCATA	GAAAACAACA	ACATCAAGTC	AATTTCAAGA	CATACTTTCC	GGGTACTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:1472:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCGGCC	TTCATGGCCT	AGTACTCCAT	CTCATCCATC	TCATGGTAGT	TCAGAAATGC	60
CTATATTCCT	TCTTAAATTC	ACCAGGATTT	TTGTTTTTTC	TTTCACCCCC	TTTTTGCTTT	120
TCTTATTTTC	ATCCTTCCAT	TTCACTCATT	TCCAATCATG	TTTAGCAGTT	TCTATCCTTT	180
TCTTTCCTGG	CGTTTTAGCG	TCACACATAG	AAACCTATCA	CCATCAGCCC	TCG	233

(2) INFORMATION FOR SEQ ID NO:1473:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

```
GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTTA ATTTGAAGAT      60
ATTCTTCCTG GACTACTTGT TTATAGTTTA TTAATGAAC TGCTCTATTT CTA AAAA ACTT      120
TATTTT TAAA GTCCTTTCCC GTT TAGAATG CGGCATAC TC TTGCTTGTGG GGTATATATC      180
TCTGATCGTG ATA ACTACCT ACCGAAAACC TTTCATGGCT CCTTGCCAAC TACAAAATTG      240
CGATATCCTC GAG                                     253
```

(2) INFORMATION FOR SEQ ID NO:1474:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 424 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

```
GAATTCGGNC TTCATGGCCT ACCGCAAGTT CCTCCTGACC TTCAGGGAGC CTGACTTAGA      60
GAAGAAGTAC TCCAAGCAGG TAGACGACCG ATTTGGTGCC TATGTGGCGT GTGCCTCGCT      120
CGTCTTCCTC TTCATCTGCT TTGTCCAGAT CACCATCGTG CCCCACTCCA TATTCATGCT      180
CAGCTTCTAC CTGACCTGTT CCCTGCTGCT GACCTTGGTG GTGTTTGTGT CTGTGATCTA      240
CTCCTGCGTA AAGCTCTTCC CCTCCCCACT GCAGACCCTC TCCAGGAAGA TCGTGCGGTC      300
CAAGATGAAC AGCACCTTGG TTGGGGTGTT CACCATCACC CTGGTGTTC TGGCGGCTTT      360
TGTC AACATG TTCACGTGCA ACTCCAGGGA CCTGCTGGGC TGCTTGGCAC AGGAGCGTCT      420
CGAG                                     424
```

(2) INFORMATION FOR SEQ ID NO:1475:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

```
GAATTCGGCC TTCATGGCCT ACTCTGTGTT GGTAAGTAAA AGCCCTCCAG CATAGGTATA      60
CACTTAGTTG TTCCTTCCAG TGGTTATCAT ACTTCTTTTC TTGCCATAGT TACATGCTAA      120
CAACGTCCCA AAGCTATAGT TGCTCTTGCA TTTTGTCTT AATCTTGTA AGATAAACTA      180
ATAATACAGG GAGTAAATGT GCACTGTTTA TTAATTAAAA TCCCCGGGAC ACGGGATAAA      240
CTGAAGGAAA TCGTGCTTTT TGAAAAGTAG GTGTAGCTTG CCATGCTGCA TTGTCTTATA      300
CCCACAAAAC TCGAG                                     315
```

(2) INFORMATION FOR SEQ ID NO:1476:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

```
GAATTCGGCC TTCATGGCCT AGCCATCATG TTTATTAGAA GGTGGATT TGGTGTGTGC   60
TCTAGACAGA TACAGAATAA ATACCTGCGC CTTGAGAACA GGAAGTCCAC GATTCATACA   120
AAGTGCTCAC TACAGGAAGT TGCTGTGTCA AAATCCAGGC AAGGACCCAA CTCGGGCAG    180
CCCTCCTCC CTGCTGACCT CAACAAGGCG TGTGCTATTG TTTTATTATT TATTATTTTA    240
TTTCTCTTTA TTATTATTAA TATTATTATT ATTTGCTTTT GCTGTGGTCA CTATCATTGG    300
CAAAGTTCCT TTCCTCGA G                                     321
```

(2) INFORMATION FOR SEQ ID NO:1477:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 215 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

```
GAATTCGGCC TTCATGGCCT AAGCAAAGCT AAGTGTAATA CTAAAAGCA GTTGTGTGCA   60
ACTGGTCATA AAAGTGATTA AATCTAAAGC TGGCATTAA T AAGGAAGCAA GGTAATAAAA   120
CAAAAATATA AACAGCTTTG AGAAAGTACA CCTAATAACA AAATCTTGTA ACACAACAAA   180
TGAAAATCAC AAAAAATATA AGGAGACTCC TCGAG                                     215
```

(2) INFORMATION FOR SEQ ID NO:1478:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

```
GAATTCGGCC TTCATGGCCT AATCGGTCTC CTTTGGAGAG ATCACTAGAA CAGAAAAACA   60
ACCCAGATTA TAACTGGAAT GTTCGGAAAA CATAAAGGAC AGCTCGTAAA GGAGAGAGTA   120
AGAGTCACCA AACACGTGGA TATTTTGGT CTGATCCTAC AGTAGCCGGT TATCTAGACC   180
AGTAAGTGGA GTTTTGGACA TGCTGCTGCT GTCAACTCAC TGGCTGAAGG AGCACTTCAA   240
GGAATGGGAG GCCTTTCACT GGGTCCAGCT CTGATTCGGA TCACTCTCGA G          291
```

(2) INFORMATION FOR SEQ ID NO:1479:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 514 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

```
GAATTCGGCC TTCATGGCCT AGAGAAAGAA ATGGCTCGAA CAGAAAACAG TGGTCTTGAA      60
AGGCAACGCA ACAGTAGGTT ACAAATAGCA TTAGCTTTTT CTTTAAAGAA ATTCAATTGTA     120
ACCAAGTGAAG GATAAGATTT TAAATTAGAA AAATGGAAAT CCTATGAATA AAAAAGTAGT     180
AAGCTTGAGA GCAGAATCAC TGTGGAAAAA AAACAGATTG AAAAATAACT TGCAGGTATC     240
ATAGACAGGA AATTGCCACT AGAGAAAACA GGAAACTTGT GATAGATAAA AATGAAGTAT     300
TTTCATTTGG AACAAGAGAC CAACTGAAGA GAGATCAAGT GAAGGGGGTT TATTTAATG     360
AAACACAAAG ATTCTTGTGG AAATCAAAGT GCCGGAGCCA GAAACAGGGC TCAACCTTCA     420
AGATTAGAGC TGTATTCAAG TTGTTCAAGT TGGCTCTCGG TCCCAAAGCA ACAGCAATGT     480
CACTAAGGTT ACAAGTAAAA GGTAAGCCCT CGAG                                     514
```

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

```
GAATTCTAGA CCTGCCCTC CACTGCTCCC CATACCCTGG CACGATGCGT TCCTGGTCAC      60
TGATCACCAT CATTTTGGGA AGAGAAATCCC AATCCCTGGC ACCTGGGTTT GCCTCATCCA     120
ACCATCCTTC CTTTCTCAG CTGCACCCC TCTGCAGATC TGAAGACACA CCTCACTCTT     180
CCAGGGCCCT CGAG                                     194
```

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

```
GACGCGCCCG GCCTCCTCTT TCATTTCAGT ATACGTAATA AGAAGTCAGA AATTACCTTT      60
AACCAAGCCT GGAAATCTCC TTATCTAGAT CATTATATTC TTTAGGTACA TTTTCTACTT     120
TCTACATTAC CACTCACAAC AATATTGCTA AATTTTTCCT TCTAAATAAG AAGGATTCCC     180
TTTTTCTAAT AACACTTTCT TTATTTTCT TTAACCTTTC ACTGAAAGCC CCCTCAAAG      240
CTACCTGGCT TATGCTAACA GTATGTTTGA TGTCTTTCA ATACTACTCT GTTTCATCT      300
GTCTAGCATC CACCTGCCTC CCAATCTCAA AGTCTCCATC ATATTTTGTC AGTTTCTAGT     360
TTTTTTGTTA TGGTGCAACC TCGAG                                     385
```

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

GAATTCGGCC	TTCATGGCCT	AGGTTCTGGG	ATAGCTGATT	GTTGGCCACC	CCGCCCCTGG	60
AATGGAAACC	CTGTTAGGCC	AGGGCCAGAG	CAGGTGGCCA	TGAAGCAAGA	CGGCAAAGGC	120
ATTGGAGGAT	GTCCCACCTC	CACACATACG	CCCAGGCATT	TCTTGGCTGG	GGAATGGTGT	180
TACAGGATCC	ACAAGCACAG	AGATGGGAAA	ACAGTGTGTC	TGGGGAACAC	CAAGAGTTGG	240
GGTTGCCTGG	AGGACAGATA	GACTCAGGGG	GGACATCCAG	AGGTAACACT	AGGTCCGCAG	300
GTGGGTTTCAG	AGGCCCCAGC	TCTATCCCCT	TATCCCAGC	CGGATTAAAG	AATAATCTGA	360
GTATGTTCC	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

GAATTCGGCC	TTCATGGCCT	ATGGATCCAT	CATGGGACAA	TTACTAGTTA	TTTACTTTCC	60
TCCGCTTCAG	AAGGTTTTTC	AGACTGAGAG	CCTAAGCATA	CTGGATCTGT	TGTTTCTTTT	120
GGGTCTCACC	TCATCAGTGT	GCATAGTGGC	AGGCCTGGTC	AGTAATCTTC	TCTACTGTTA	180
TAGTACAGCA	GCTTTTAGGT	CCACTGATTG	CATTCTTAAT	TTGAGTATTT	AATATTTATT	240
TTATTAACCT	AAGGTTTTCA	TTTGTCACTA	TAGCATGGTC	TCATAATTTT	CAAAAAATCA	300
GAAAACAGTA	GATGTTGGCG	TGGATGCAGT	GAACAGGGTT	ACTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 709 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

GAATTCGGCC	TTCATGGCCT	ACGAGAATAT	TGTGGAGAAC	TGGTCAGTAG	AAGAACAAGC	60
AATGGAAATG	GATTTGAGTG	TCCTTCAACA	GGTAGAAGAT	CTAGAAAGGA	GAGTTGCATC	120
AGCAAGTTTG	CAAGTGAAGG	GTTGGATGTG	TCCAGAGCCT	GCATCAGAAA	GGGAGGACTT	180
GGTATATTTT	GAACATAAAT	CATTTACTAA	ATTGTGCAAG	GAGCATGATG	GAGAATTTAC	240
TGGCGAAGAC	GAAAGCAGTG	CACATGCACT	AGAACGGAAG	AGTGACAACC	CCCTAGATAT	300
AGCTGTAACC	AGGCTGGCTG	ATTTGGAGCG	GAACATTGAA	AGAAGGTATC	TGAAGAGCCC	360
CTTAAGTACC	ACCATTGAGA	TCAAACCTGA	TAATGTGGGC	ACAGTTACTG	TCCCTGCTCC	420
TGCACCATCC	GTTAGTGGTG	ATGGTGACGG	AATTGAAGAG	GATATTGCTC	CAGGGCTCAG	480
GGTATGGAGA	AGGGCATTAT	CAGAAGCTCG	CAGTGCTGCA	CAGGTAGCTC	TGTGCATTCA	540
GCAATTACAG	AAATCAATAG	CATGGGAAAA	ATCAATTATG	AAAGTTTACT	GCCAAATCTG	600
TCGAAAGGGA	GATAATGAAG	AACTGCTTCT	TCTTTGTGAT	GGCTGTGACA	AAGGCTGTCA	660
TACCTACTGC	CATAGACCCA	AGATTACAAC	AATCCCAGAT	GCTCTCGAG		709

(2) INFORMATION FOR SEQ ID NO:1485:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 272 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

GAATTCGGCC	TTCATGGCCT	ACTGTTTCAG	AACTTCCGTA	CCTTTTCTT	GTATGTAGCA	60
CGTATAAATG	CAGCTGTCAT	GCAGTTCTTT	TCTTTTGCTA	GAAAATTAGT	CAGGAGGTAA	120
GATGAATCTT	CCAAAGTTAT	GTAAATTTT	GTTTAACTTG	ACAAATTAAT	CTTTGTTCTT	180
ATTAAACAAA	TACGTAAACA	AATACTGGAA	AAGCAAAGCT	TATATTGGG	AGTAAAATGT	240
ATCTTAAAT	GCATGTTCAA	CTTTGCTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:1486:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

GAATTCGGCC	TTCATGGCCT	ACCGAGGACG	AGGGGAAGAT	GTCACGCAAG	ATAGAAGGCT	60
TTTGTTTATT	ACTTCTCTTT	GGCTATGAAG	CCACATGGG	ATTATCGTCT	ACCGAGGATG	120
AAGGCGAGGA	CCCCTGGTAC	CAAAAAGCAT	GCAAGTGCGA	TTGCCAAGGA	GGACCCAATG	180
CTCTGTGGTC	TGCAGGTGCC	ACCTCCTTGG	ACTGTATACC	AGAATGCCCA	TATACAAGC	240
CTCTGGGTTT	CGAGTCAGGG	GAGGTCACAC	CGGACCAGAT	CACCTGCTCT	AACCCGGAGC	300
AGTATGTGGG	CTGGTATTCT	TCGTGGACTG	CAAACAAGGC	CCATCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:1487:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

GAATTCGGCC	TTCATGGCCT	AGTACCTGAA	GGCCTTCAAG	GTGGCCTACA	GCCTTAATGG	60
ACACGAATTC	GATTTTCATCC	ATGATGTTAA	TAAAAACAC	AAGGAGTTTG	TGGGTAACTG	120
GAACAAAAAC	GCGGTGCATG	TCAACCTGTT	TGAGACCCCT	GTGGAGGCTC	AGTACGTGAG	180
ATTGTACCCC	ACGAGCTGCC	ACACGGCCTG	CACTCTGCGC	TTTGAGCTAC	TGGGCTGTGA	240
GCTGAACGGA	TGCGCCAATC	CCCTGGGCGT	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:1488:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 595 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

```

GAATTCGGCC TTCATGGCCT AGTGGAGATT ACTTGGCACC ACTCTCCTTT CACAGAGCAG      60
AGTCTGAATA GTCTTCAGAG ATAGGCCTGT GGGCCAGATT GCCATCCCCT ATGGACCAGA      120
AGCCAAGGAT CTCTCTAGTG ATGGTCAGAG GGCCCAAATG GCAGGGATAC CCAGTGATGT      180
CAGGAGGAAT AGTACAGACA GAAGGTGCTA AGCAGACAAT TCAACTGCCA TGTTTGTCCA      240
CCCCCTGTGA GCAGGGATTA GGTGTTTCAGG CCAGTATCTT GGGCATGGGG GAGCCTTTGG      300
CCAGAAGAGG TATAAAGCTC AGAAGTTTT CAGTCTGATA ACTATTGATA TAATTCCAT      360
AGTGTGAGGG AGCGGTATGC TCTACCCTTG TGTATTTAAG GCAGGACAGA GAAATTGAGG      420
ATGCCCCCTGG GGCTAGATCG ATGATATGAC CAGAAATCAA AAAGGGAATG CATTATTTAT      480
TGCTGTGTAA CACTGTTAAG AGAGGAGGTA GTTAAGGGAT GGATAGGCAC ATAGAGAGGG      540
AAGGTCTCAG GAGAAGGGAT AGAAAGGAAC TATGTTTACA AGAACCAACAC TCGAG      595

```

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

```

GAATTCGGCC TTCATGGCCT ACAATTTAAT AGTATAACAA ATCCCCTAGA ATAGTAGAGG      60
AGAGAGGAAT CTTCCCCTGA TATGTTTTTG TAATACTTCT TCCTCCTCTT CAGTCAATAG      120
GGAAATGTTT GTTGAAAGAC TACTTTGCAG ACATTTAGAA AGATACAGAG TAAGTGTAAG      180
ATGTCCCTCC TTGTCCTTGA GGAGTCTCTA GTCAGGCACA GGTAGGACTA AATGAAAAAC      240
AACTACAGAA CTAAGTAGAA GAGTGTACAA TAATATGGGG AATGTGGAAC ACTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

```

GAATTCGGCC TTCATGGCCT ACTTACTTTT CCAAAGAATT TTTCCACCT GGAATAAGAA      60
GAGAGGACTA GTTGAAACAT TTGAGCTGGA GAGGCTTATG GGCAATATGA AGTGGGCCAA      120
ATTCTTGCAA TACACCCTAT TCAATTGAAA GTACAGTGTC TAAGGATAAG AATACTTCTT      180
TAAAGACCAA CAATGTGTTT AATGCAATCT TAATTAGTAA ATGGTTTACA TTTTCTCTAT      240
TGTATTGGT TTTAAAATTT GCTACCGCTC GAG      273

```

(2) INFORMATION FOR SEQ ID NO:1491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 660 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

```

GAATTCGGCC TTCATGGCCT ATTGAATTCT AGACCTGCCT CAGGGTAAGG GAGATTTAAT      60
CTTTTCTTT ACTATTTTCT AGTTTCTATG AGCATGGATT ACTTGTGCAA ATCAAAACAA      120
AACAAACGGA TGGCTCATCC GGCAACATC CATGGGCAGG GTTGGTGTCT GGTGCTGGAC      180
GCAGAGATGA ATGGAGGGCT CTGGCCTCAG CGGCTCACAG TCTGGTGAGC ATAGACAGTG      240
CTTTCGATGT GAGAGCAGAC CTGAGTGTCT CCTGGGACTC CAGGCACAGT TCTCCCTGCA      300
GCTCACAGCA CTTACCCTTA CTGCACCATT AACTTCTACT CTAGCTCACT GCCTCTTAAC      360
TCTGAGCGCC TTGAAGGCAC AAAATGAGTC CCATCTGGGT CTTTAGCAGC TGGCAGAAAA      420
CCTAGCTCAA ACTCATGCTC TAAAAACCCC TGCTGAGGGA GTGGGCGAAT GCAGGCAGCC      480
CTGGCAGTGG GATCAAGTTC AGGGAGTGGC ACTGGAGGCA TCACCCCAAG GCTGAGAAGA      540
CCTTGAAC TGTTTCAGGG TTTTGCTGTC TCTCCCAAGG CATGACTCGG CCCAGGAGGA      600
GATGGGGCAG ATGCTGCAGA AGGAGGGTTC ATGCCCTCC ACTGCTGCCC ATGACTCGAG      660

```

(2) INFORMATION FOR SEQ ID NO:1492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

```

GCTGTGCTAT CTGTGTCCA GCATCTGACA CAGTTGGTTT TATATTTTGT CTGGTTTCTA      60
GTTATTAAGC AGGTAAAGTC TGGTTCCTGC TGTCTATAT AGCAGGAAGC AAAGGTCTCTC      120
TCATGAATTT TTAGCATAAT AACATAAGCG TGGAATCCAA AAATTCATTA CACAGATCCTC      180
GGAAATCTGT TTACTATGTT TTATACATTC TGTGAAAGCT GGAGAATATA TATTTGTTTTT      240
ACTATGTGTA TCGCAAATAA AATATCAATT TCATGTGCCA GAGAATTGAA TACATTATCA      300
AAGGGTCAAC TCGAG                                     315

```

(2) INFORMATION FOR SEQ ID NO:1493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```

GGGACAACAA GCCCATCTGG ATGCACGCAG AGGAGCGGGA GGAAAGCAAG GATAAGCGCC      60
GGGACAGCGC CCCCTATGGG GAATACGGCA GCTGGTACAA GGCCTGTAAA GTAGACAGCC      120
CCACAGTCAA CACCACCTG CGCAGCTTGG GGGCCCTATA CCGGCGCCAG GGCAAGCTGG      180
AAGCCGCGCA CACACTAGAG GACTGTGCCA GCCGTAACCG CAAGCAGGGT TTGGACCCCG      240
CAAGCCAGAC CAAGGTGGTA GAACTGCTGA AAGATGGCAG TGGCAGGCGG GGAGACCCGC      300
GCAGCAGCCG AGACATGGCT GGGGGTGCCG GGCCTCGGTC TGAGTCTGAC CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:1494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

GAATTCGGCC	TTCATGGCCT	AGTAAAGGGA	TTTATAATAA	CATTAAAAAT	TTCGTTAGAT	60
TCCAGCTGAG	CACGAGTATA	GCAGCATTAA	CTTTAATCTC	ATTGGCTACA	TTAATGAACT	120
TTCCTAATCC	TCTCAATGCC	ATGCAGATTT	TGTGGATCAA	TATTATTATG	GATGGACCCC	180
CAGCTCAGAG	CCTTGGAGTA	GAACCACTGG	ATAAAGATGT	CATTCGTAAA	CCTCCTCGCA	240
ACTGGAAGA	CAGCATTTTG	ACTAAAAACT	TGATACTTAA	AATACTTGTT	TCATCAATAA	300
TCATTGTTTG	TGGGACTTTG	TTTGTCTTCT	GGCGTGAGCT	ACGAGACAAT	GTGATTACAC	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:1495:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 258 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

GCTCGAGCGT	TGAGGTCAAC	ACTTCCTCCA	GGGAAAAGGA	TTCCATTAAT	AGATTGAAA	60
AGTATTTTCAT	AGTCTTTCTC	TGTAAGATCC	AGCCTTACTG	GTACAACTCT	CGCACCTGCA	120
GACTCCAAGT	ACTTTACATA	GGACGCAGCA	ATATAGTATC	TTCCATAGTT	TTTCATGACT	180
TTATTACGGC	ATTTTTCAT	TAATATTCCG	ATGATGGGCT	TCTTGCGGGT	GTGCGCGTGG	240
GGTCTAGACT	ATCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:1496:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 437 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

GAATTCGGCT	TCATGGCCTA	CTCTCTTTCT	CCATGTTAAA	CCCCTTGGCA	TGAATGAAAG	60
GCTTTCCCTT	TTATCCTTGC	TGTGTTTATT	CATTGTGTCC	AATGAGCTTC	TGAAGGTAGG	120
AGTAACTTTG	CACATTTTGC	TGTGTGGGCT	GCTGCATCTC	TGCCAAAAGG	TTTATGGGAT	180
TTTTACTCAG	GAGATCCAGG	AAAAGGAGGA	GCCTGGAATC	TAAGCACTTA	TCTCCTGAAA	240
AGGTACAGAA	ACATGTTGGA	GATCTTGAGC	CTCAAGGTGC	TTGCTTCAGA	ATTTTCCTGA	300
TTCTCCCTCT	CCAGACCTAT	TCTGTTCTTG	GGACCCAAGC	TTCTTGGCTC	CAGCCCCTC	360
CCCCACTAGA	GGAGCTGGAA	AGTTTGGTGC	TGTGGTCATA	CCAAAGATGG	GCAACACCCA	420
GACTCCTCAC	CCTCGAG					437

(2) INFORMATION FOR SEQ ID NO:1497:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 516 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

```
GAATTCGGCC TTCATGGCCT AGTGCAGGTC CTGGTGCTTG ATGGTCGAGG CCATCTCCTG      60
GGCCGCCTGG CGGCCATCGT GGCTAAACAG GACTGCTGG GCCGGAAGGT GGTGGTCGTA      120
CGCTGTGAAG GCATCAACAT TTCTGGCAAT TTCTACAGAA ACAAGTTGAA GTACCTGGCT      180
TTCCTCCGCA AGCGGATGAA CACCAACCCT TCCCAGGGCC CCTACCACTT CCGGGCCCCC      240
AGCCGCATCT TCTGGCGGAC CGTGCAGGT ATGCTGCCCC ACAAACCAA GCGAGGCCAG      300
GCCGCTCTGG ACCGTCTCAA GGTGTTTGAC GGCATCCCAC CGCCCTACGA CAAGAAAAAG      360
CGGATGGTGG TTCCTGCTGC CCTCAAGGTC GTGCGTCTGA AGCCTACAAG AAAGTTTGCC      420
TATCTGGGGC GCCTGGCTCA CGAGGTGGC TGAAGTACC AGGCAGTGAC AGCCACCCTG      480
GAGGAGAAGA GGAAAGAGAA AGCCAAGAAC CTCGAG      516
```

(2) INFORMATION FOR SEQ ID NO:1498:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 329 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

```
GCGAGCTCCT GACCTCAGGT GATCTACCCG CTCAGCCTC CCAAAGTGTT AGGATTACAG      60
GCGTGAGCCA CCGCACCTGG CACCCCCCCC CTTTTTTTTT AATATAAATG ATCAGTCTTA      120
ACTCCCTAGG TTATCAGGTT GAGGGGGTGG GGATGAGGCT GGGGGACAGA TTGTTTTCCT      180
GGCTTCTAGC TCGGTGTTCT TTCTGCCTCT GTGCACAACA AGGTATGCGT GTATTGTGGT      240
TGTGGACTGT GGTGTGGAC TGCCTATTCA CAAGTGGCTA TGAGGCCCAT CTGCTGATGC      300
TTTGATGATG ACTTGGCGAT GAACTCGAG      329
```

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 430 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

```
GAATTCGGCC TTCATGGCCT AGGAGCGCGG TGGCCACGGA ACGCTGCCCC GAGCCGCGCG      60
AGGGAGGACC CGACGCGCGG CGTTTACCCA GCGCAGCGTT CCACCGCTCG GGTTTGGCTG      120
GATAAAATAA AAAATGGGGA TATTGACCTC CTGTCACTAC TGCATGGACT TTGATGGTTT      180
CCAATCATT A TTTCTCCTC TGTGTCAATC TGCCTCTTCG AGAAATTCAT ACTCCTGAAT      240
AGCTCTCCAG ACCCCCAGCT GGCCATGTGG TGAGTTCAGG GCCCAAATCA AGTAGTACCA      300
GCAATCAGGG AACTCCTATC TGTTTTGAAT GGATTACAC CAGCCACAAG CCTGGAAGA      360
TGGTGTCA CA ATCTACAGTC AGGCAGGATT CTCCTGTGGA GCCCTGGGAA GGGATCAGCG      420
ATCACTCGAG      430
```

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTCGGCC	TTCATGGCCT	AGCCAAGTCT	GGGAAGCCTT	AAGGAAAGGA	GTGCCCCGTCG	60
GCGTCTTGGT	CCTCCTGTCC	CTGCTGCAGG	GGCTGGGGCC	TCCGGAGCTG	CTGCGGGCTC	120
CCCTCAGGCT	CTGCTTCGTG	ACCCGTGACC	CATGACCCAC	AGTGCTGGCC	TCCTGTGGGG	180
CCACTATAGC	AGCCACCAGA	AGCCGCGAGG	CCCTCAGGGA	AGCCCAAGGC	CTGCAGAAGC	240
CTCCTGGCCT	GGCTGTGTCT	TCCCCACCCA	GCTCTCCCCT	GCGCCCCTGT	CTTTGTAAAT	300
TGACCCCTTCT	GGAGTGGGGG	GCGGCGGGCA	GGGCTGCTTT	TCTTAGTCTG	ATACCAAGCA	360
AGGCCTTTTC	TCGAG					375

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145,

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ

ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217,

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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.